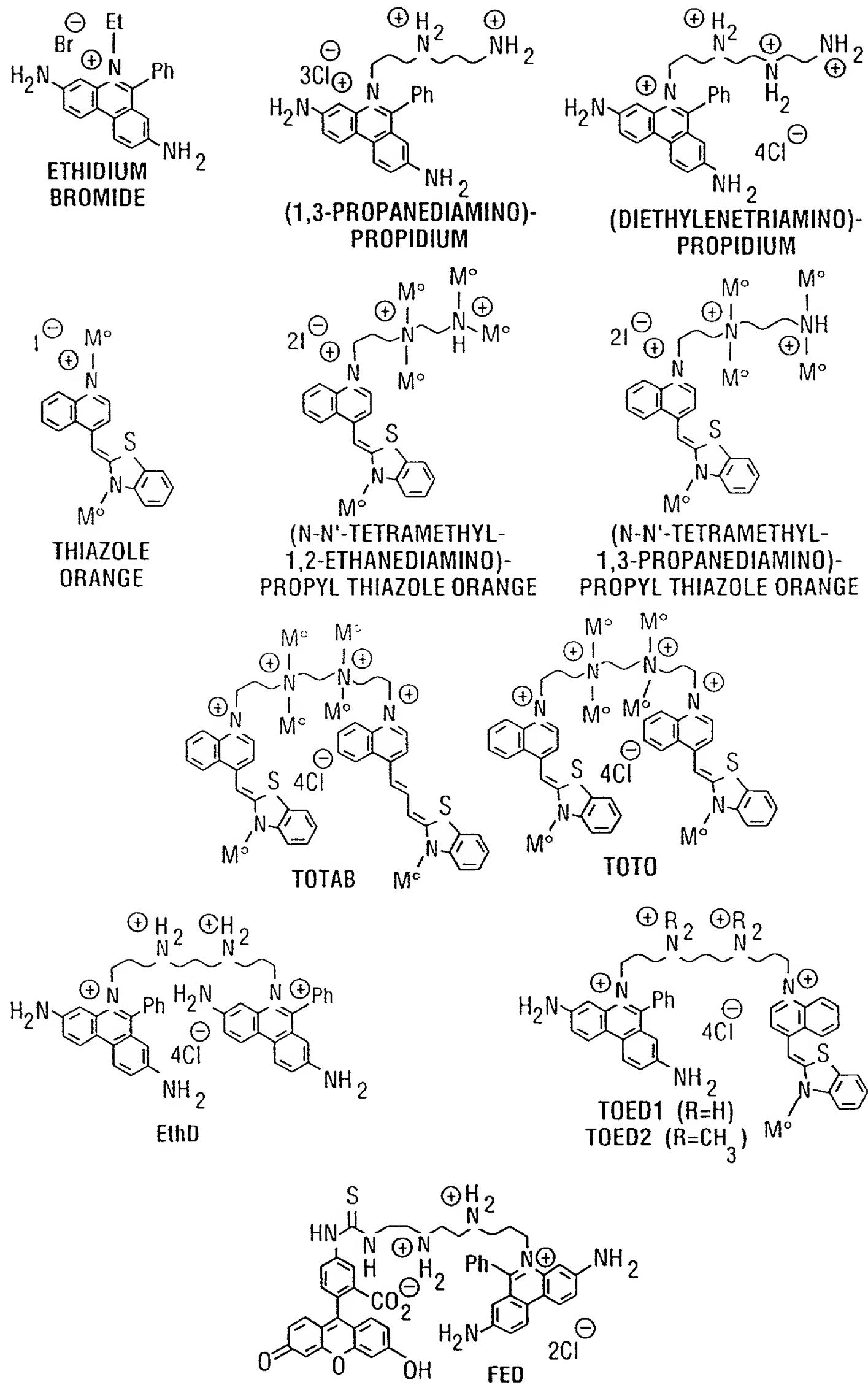
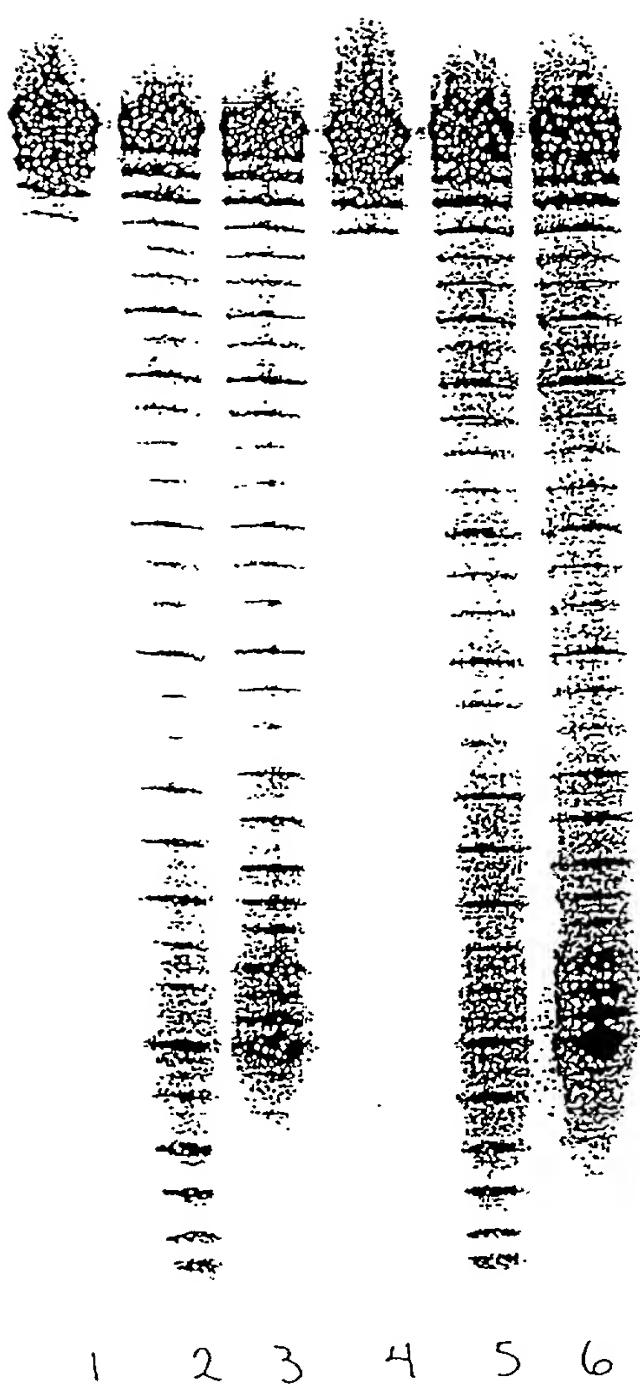


**FIGURE 1**



**FIGURE 2**



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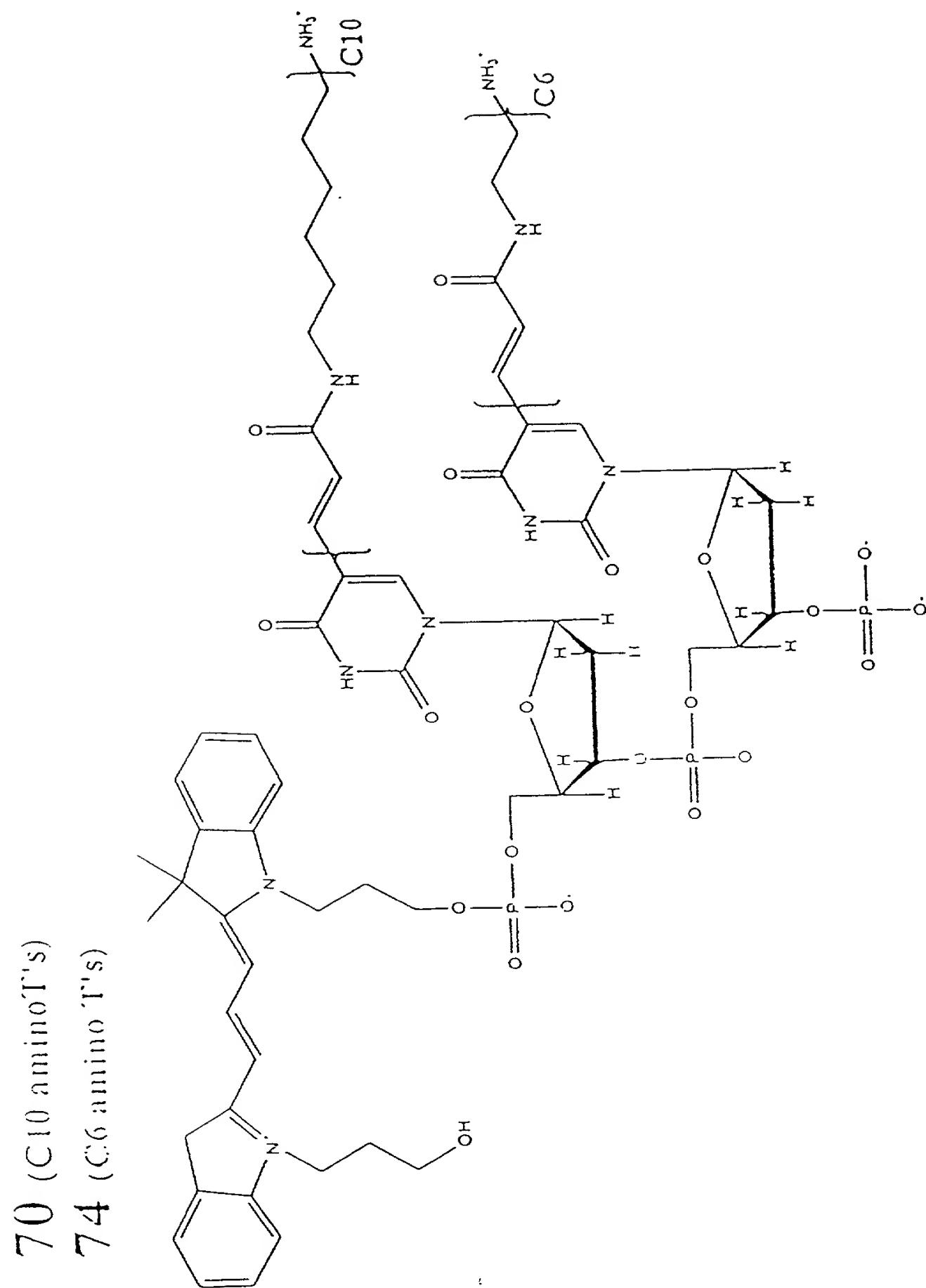
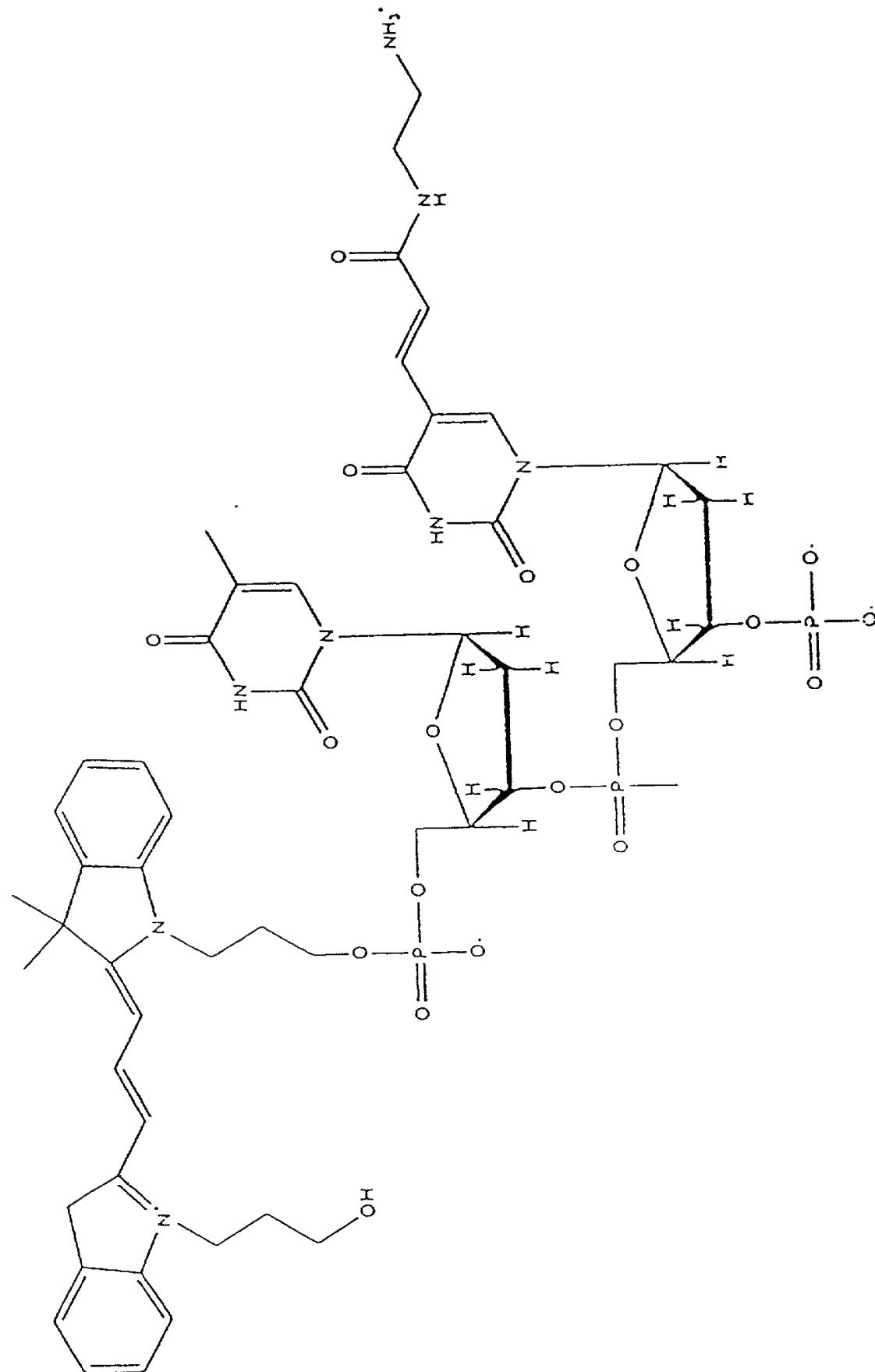


FIGURE 3

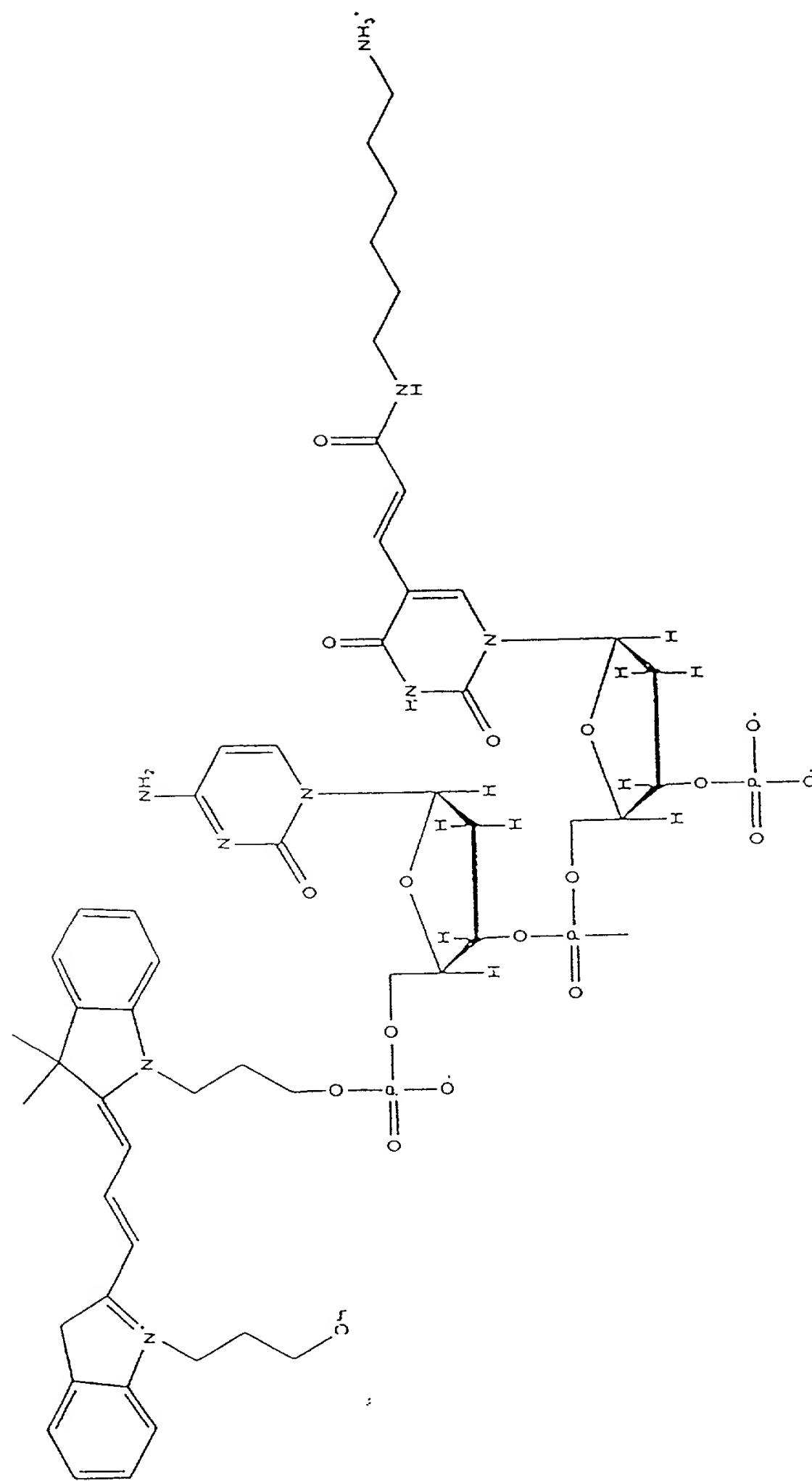
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FIGURE 4a

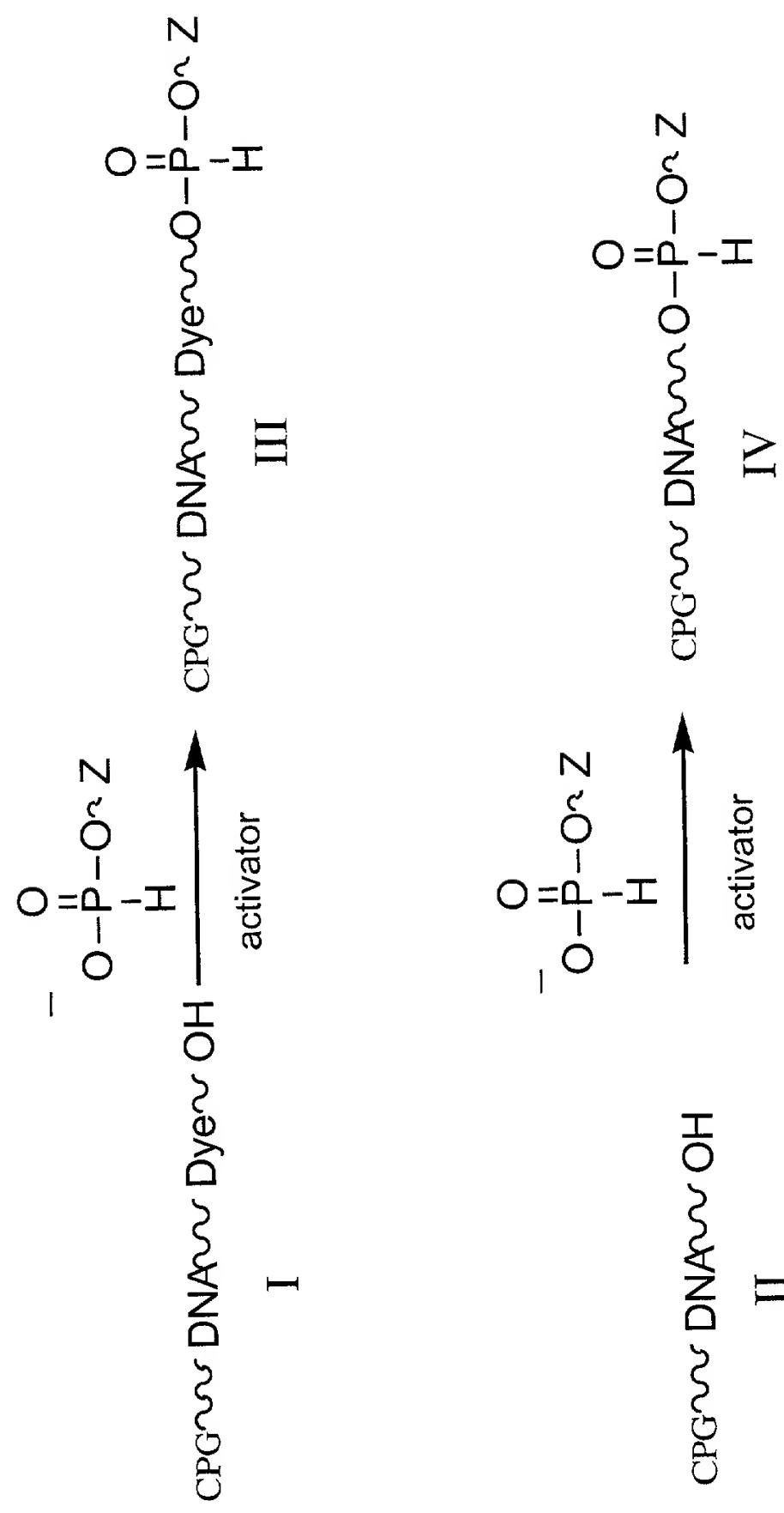
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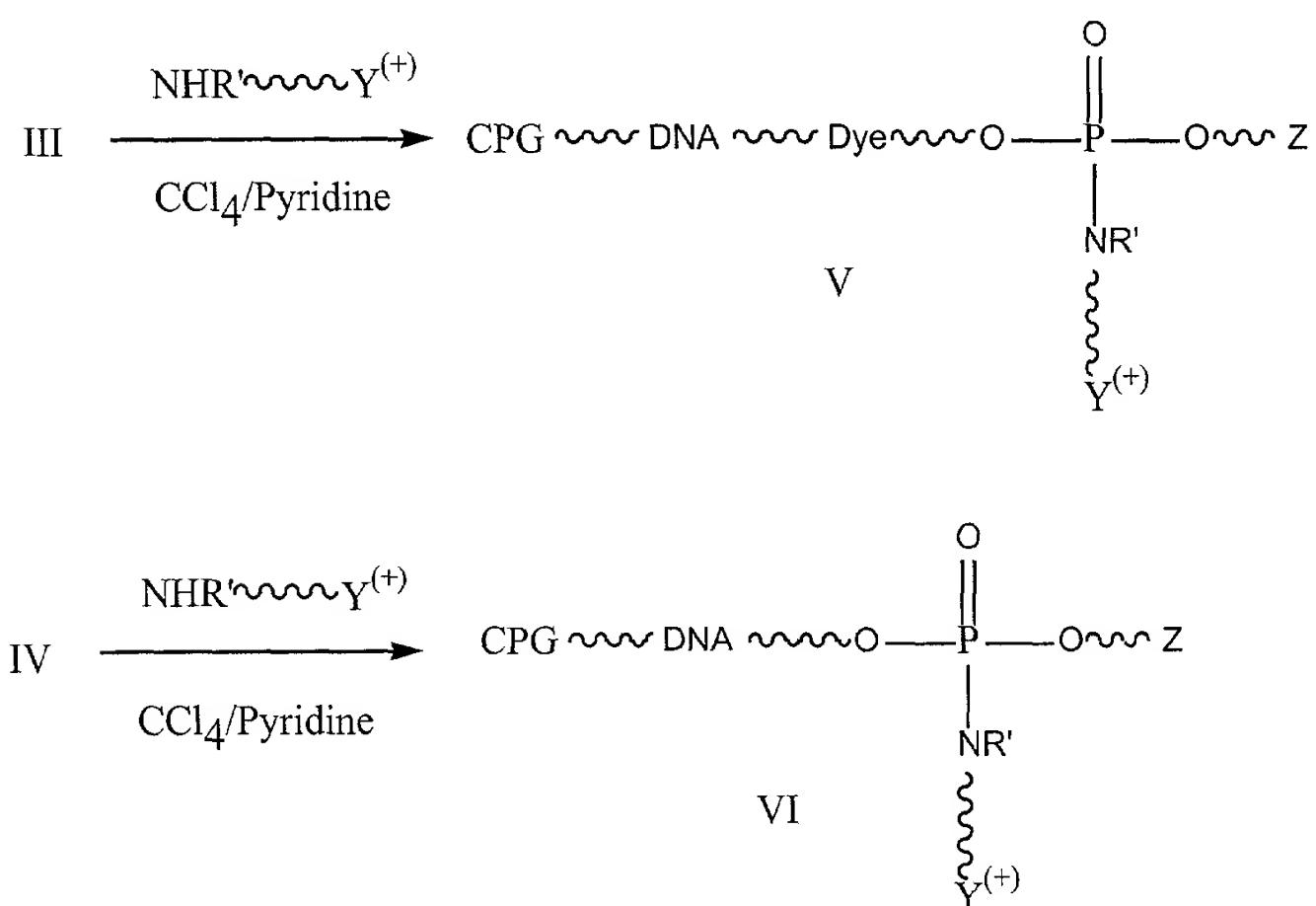
76

FIGURE 4b

**FIGURE 5**

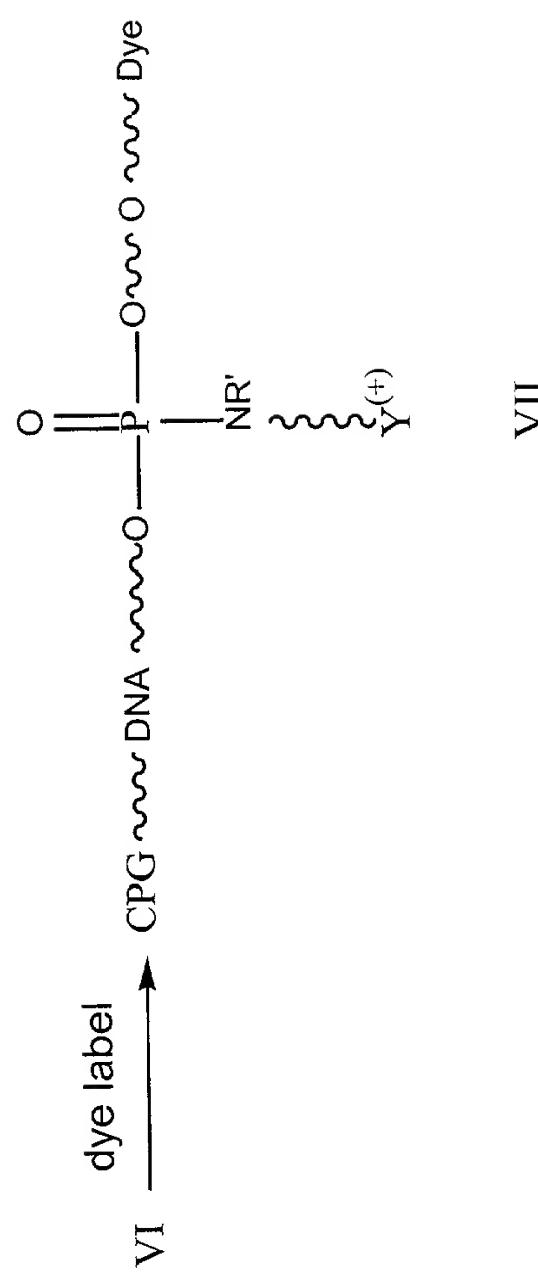


# FIGURE 6



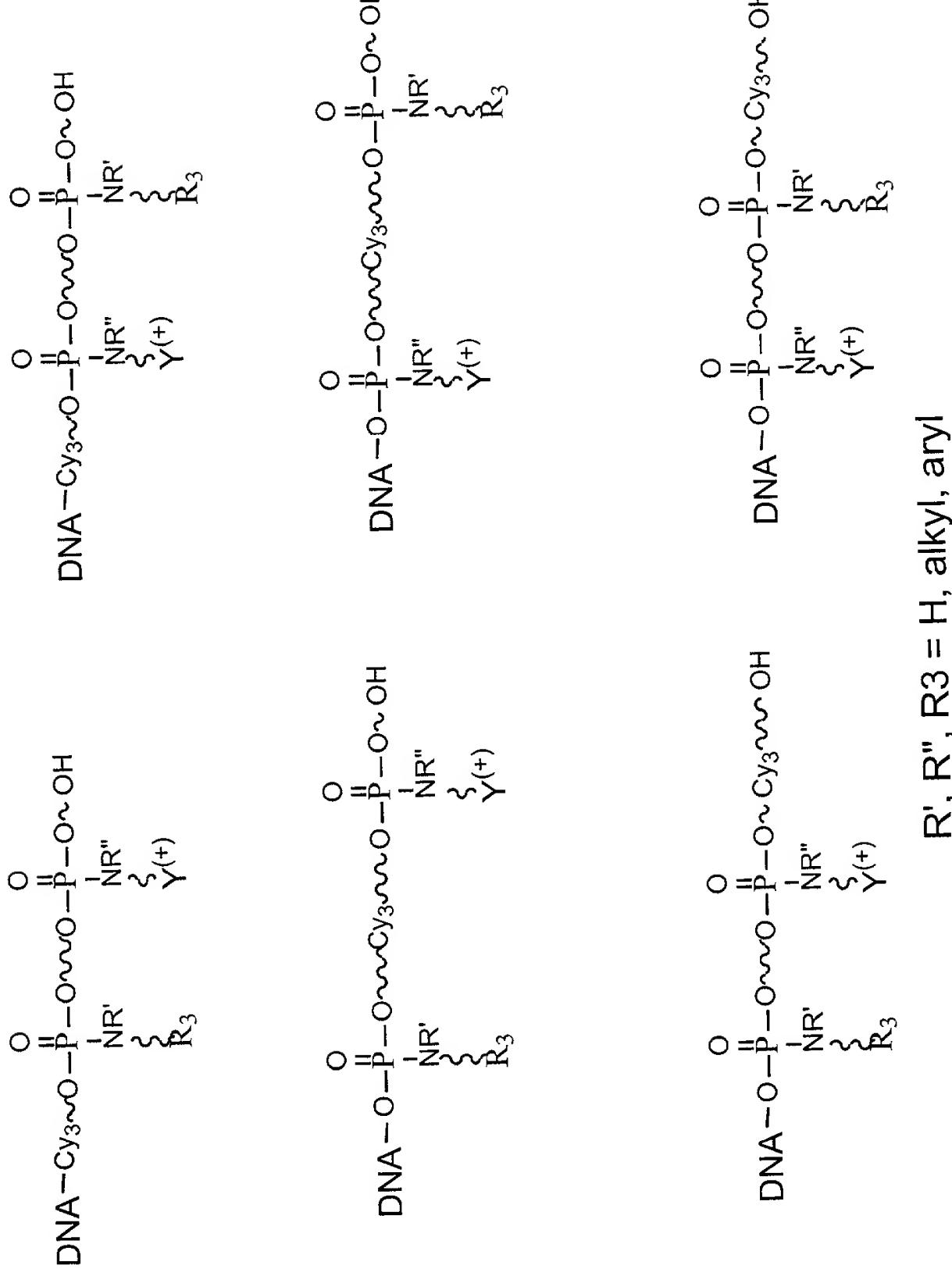
$Y^{(+)}$  = organic group capable to introduce positive charge

FIGURE 7



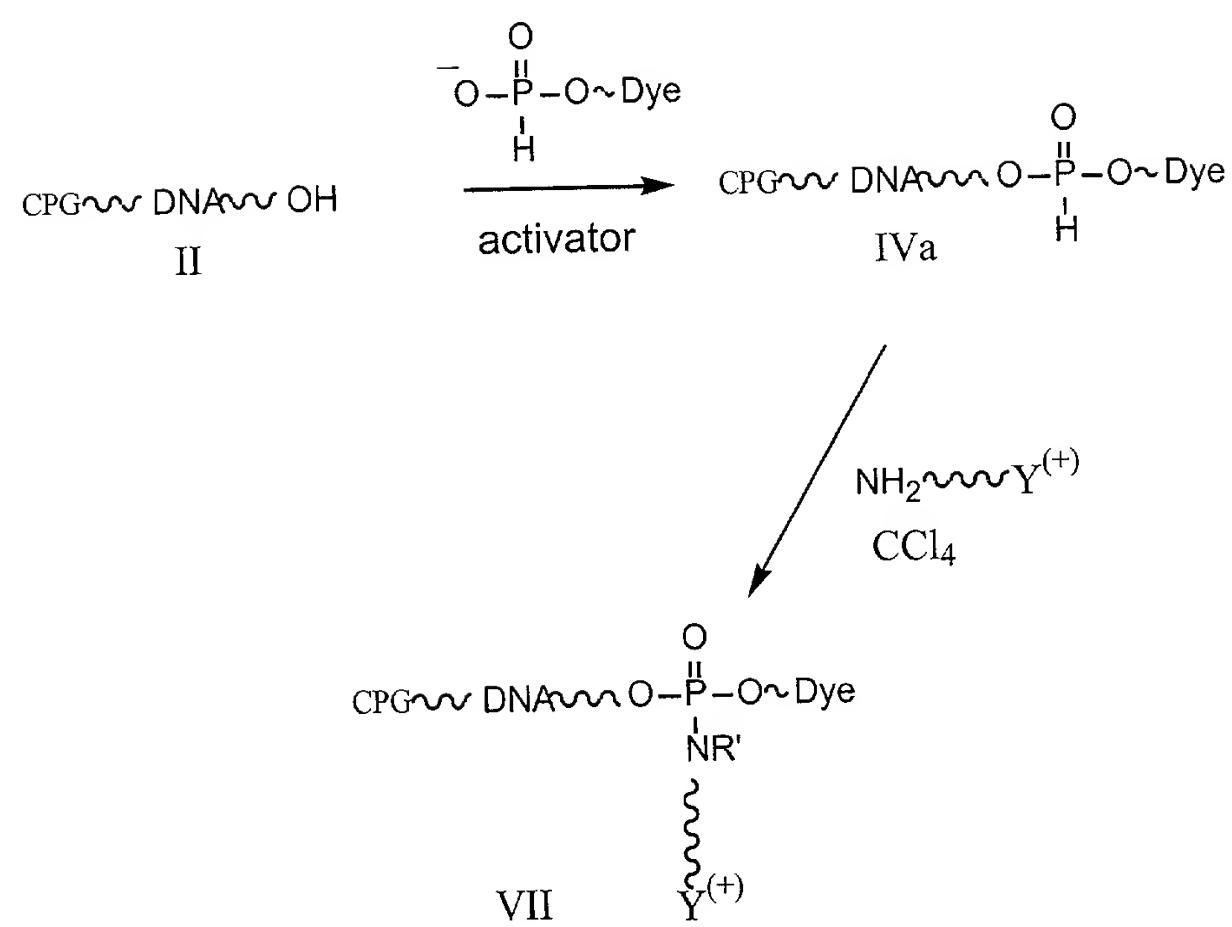
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**FIGURE 8**



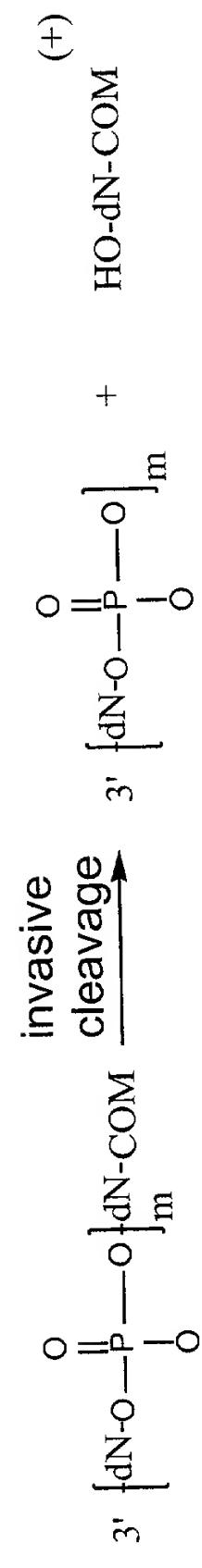
R', R'', R<sub>3</sub> = H, alkyl, aryl

FIGURE 9

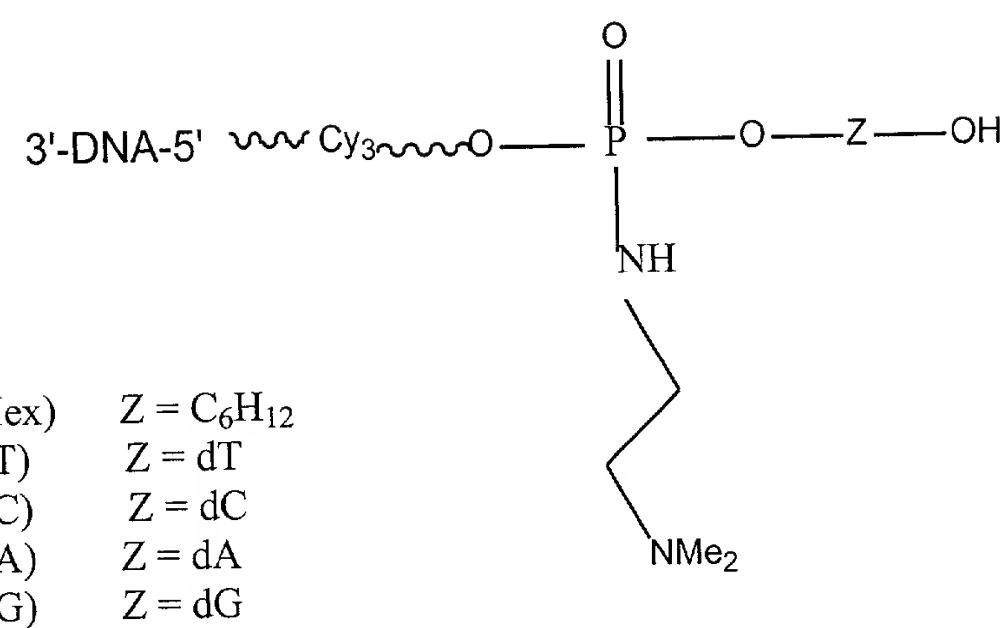


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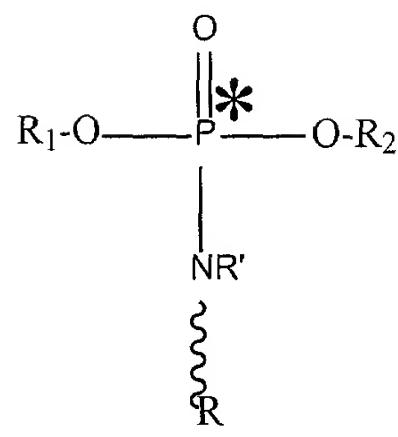
**FIGURE 10**



# FIGURE 11

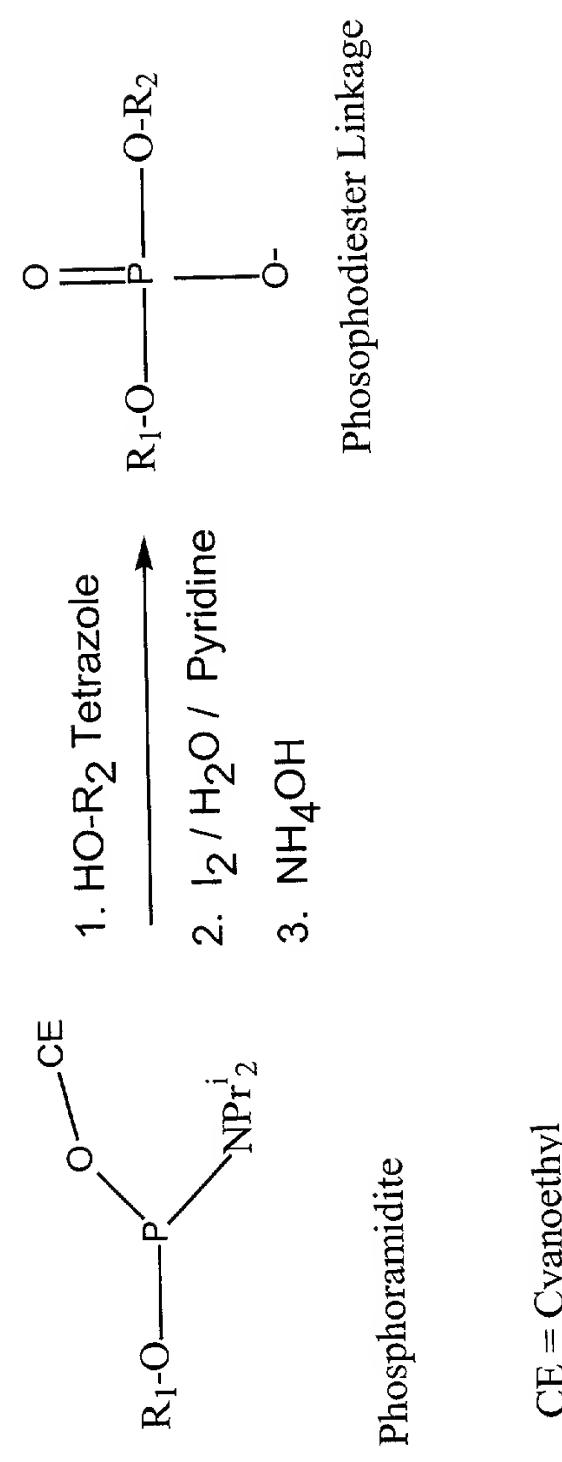


## FIGURE 12



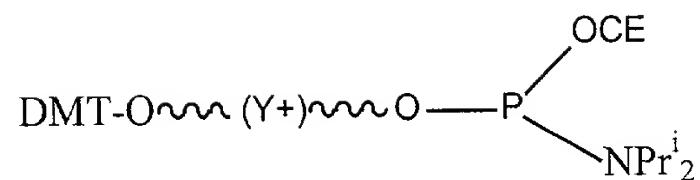
chiral phosphoramide phosphorus atom

FIGURE 13

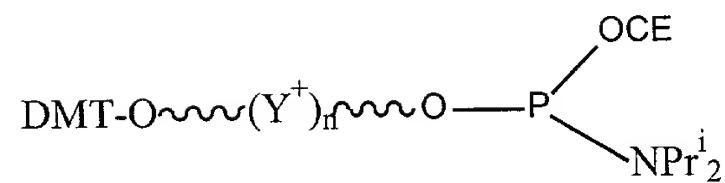


# FIGURE 14

A.



B.



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## FIGURE 15

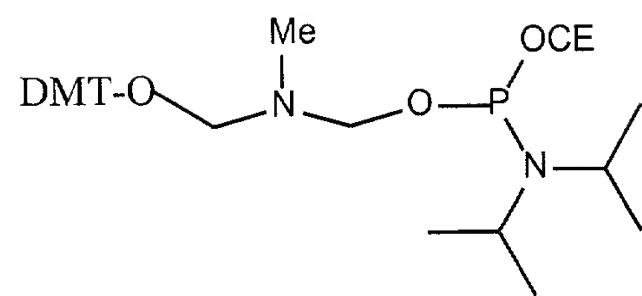
A.  $(0) \quad (+1)$   
 $3'\text{-DNA} - (\text{DP}) - (\text{PCP})$

B.  $(0) \quad (0) \quad (+1)$   
 $3'\text{-DNA} - (\text{DP}) - (\text{NP})_n - (\text{PCP})$

C.  $(0) \quad (-1) \quad (+1)$   
 $3'\text{-DNA} - (\text{DP}) - (\text{PBB})_n - (\text{PCP})_{(n+1)}$

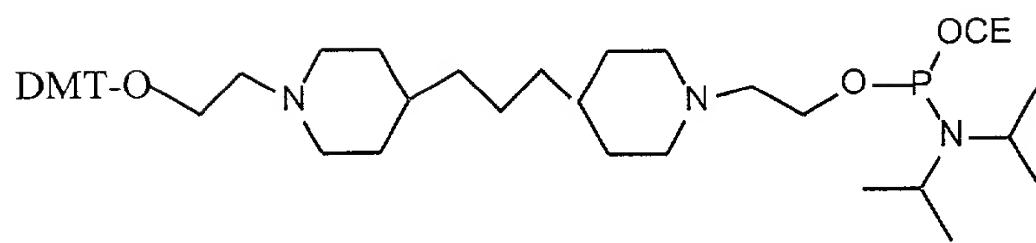
D.  $(0) \quad (-1) \quad (+1) \quad (0)$   
 $3'\text{-DNA} - (\text{DP}) - (\text{PBB})_n - (\text{PCP})_{(n+1)} - (\text{NP})_m$

## FIGURE 16



Neutral Phosphoramidite

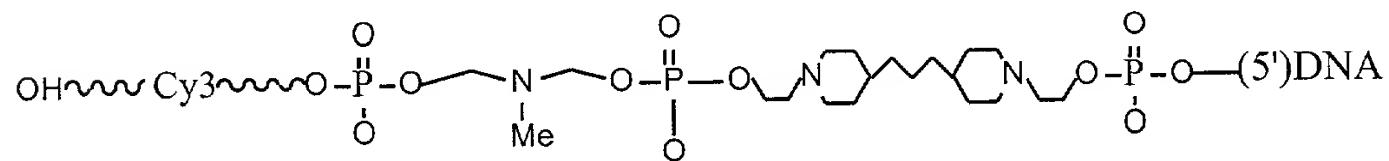
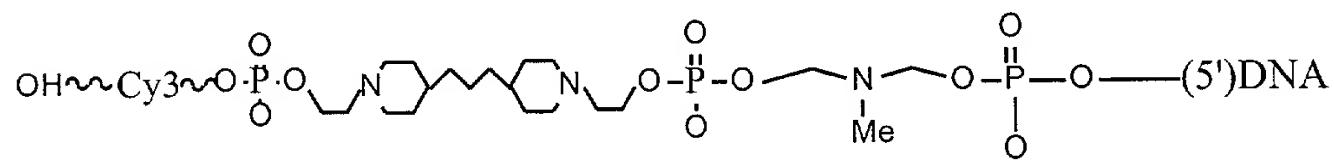
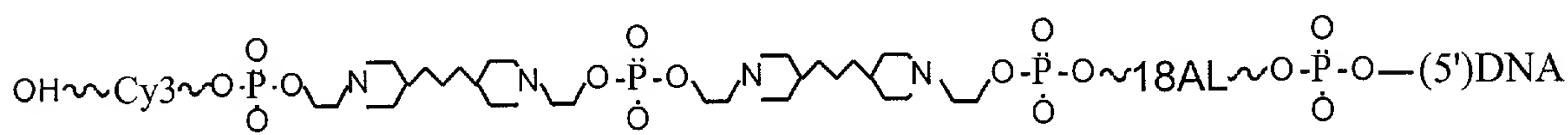
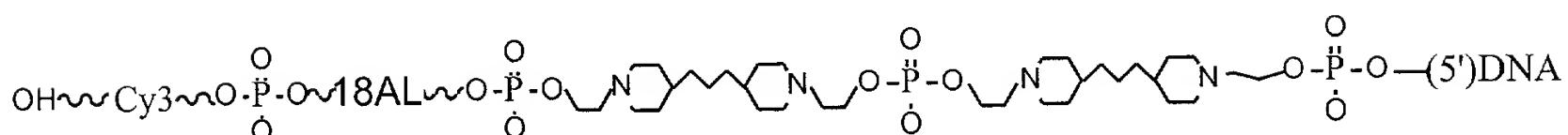
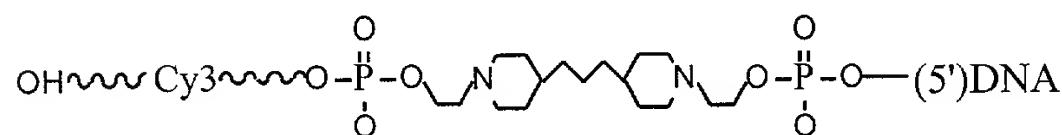
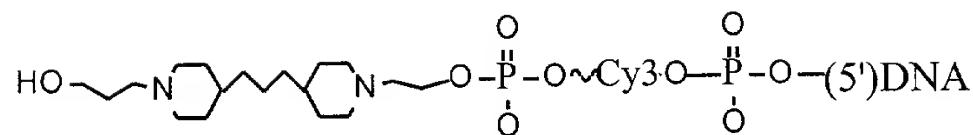
Net Charge : 0



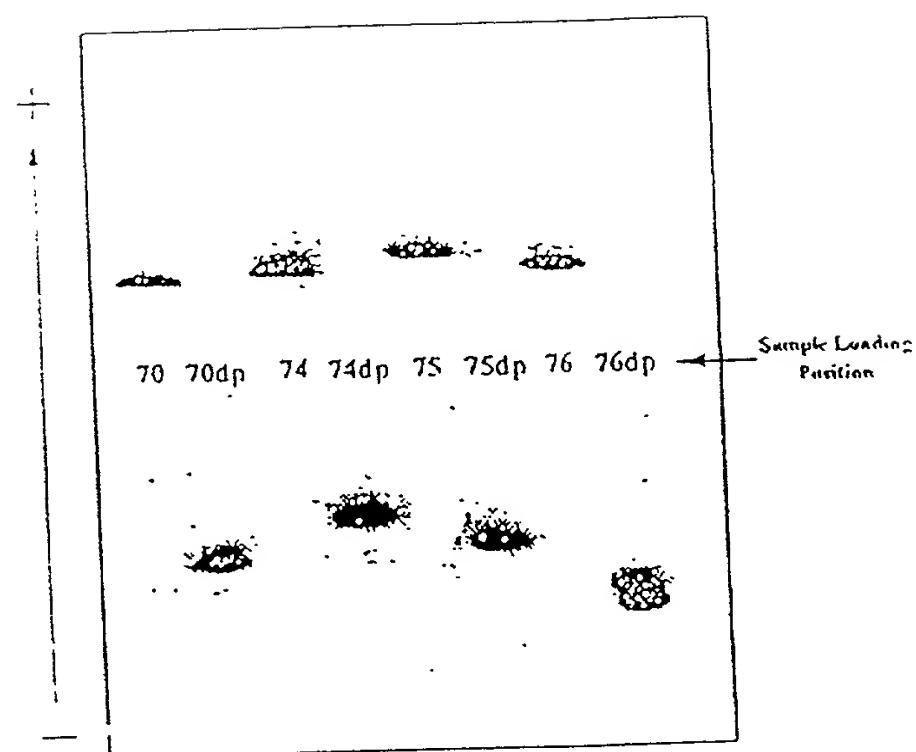
Positively Charged Phosphoramidite

Net Charge : +1

# FIGURE 17



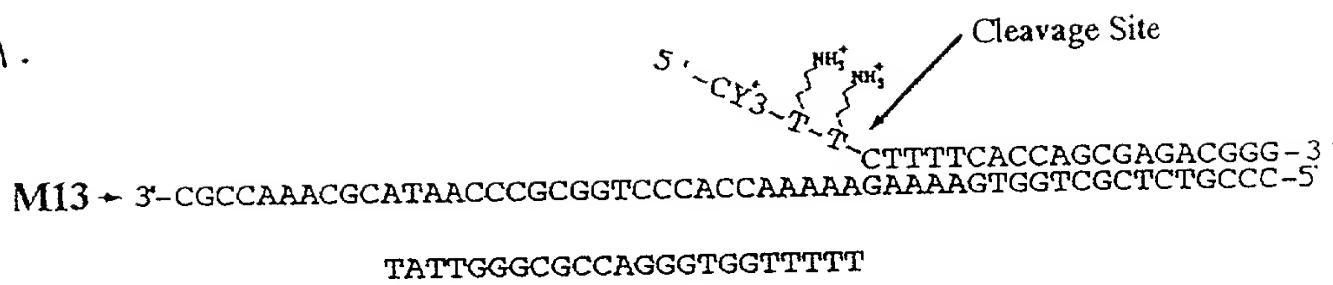
**FIGURE 18**



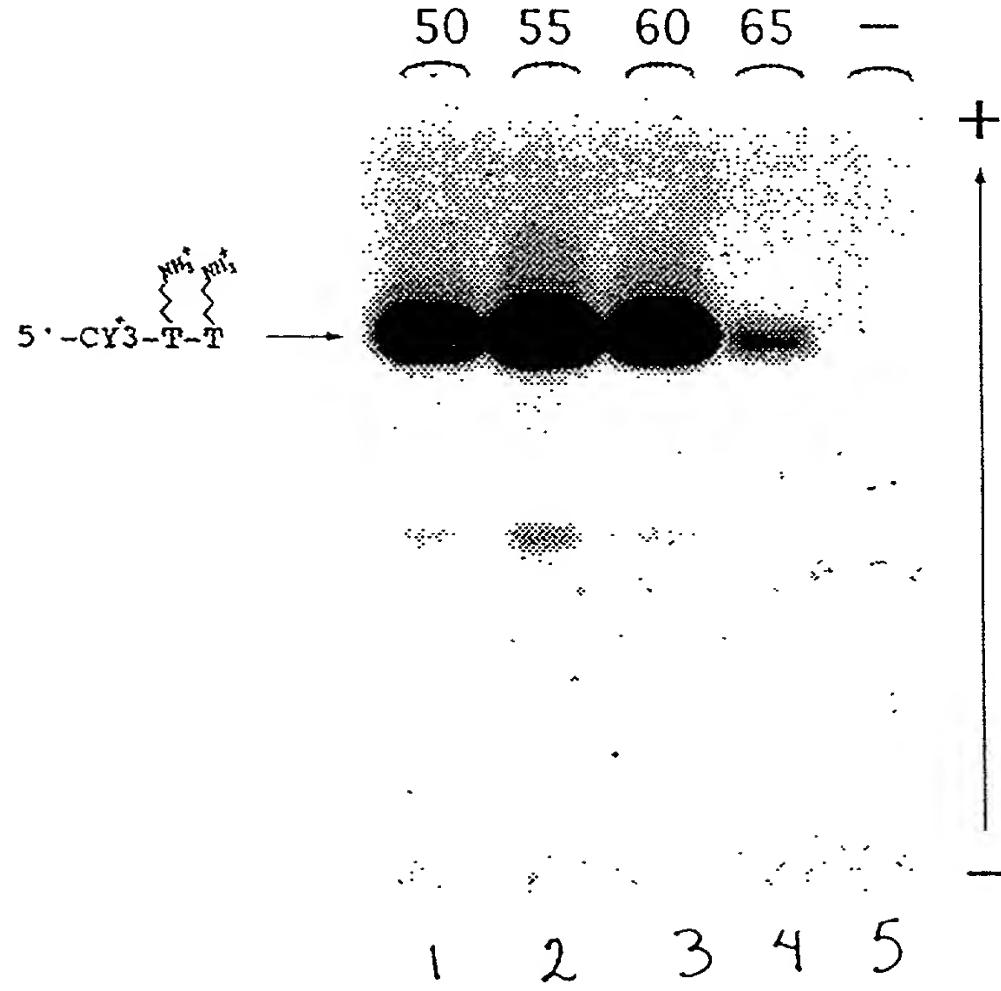
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**FIGURE 19**

A.

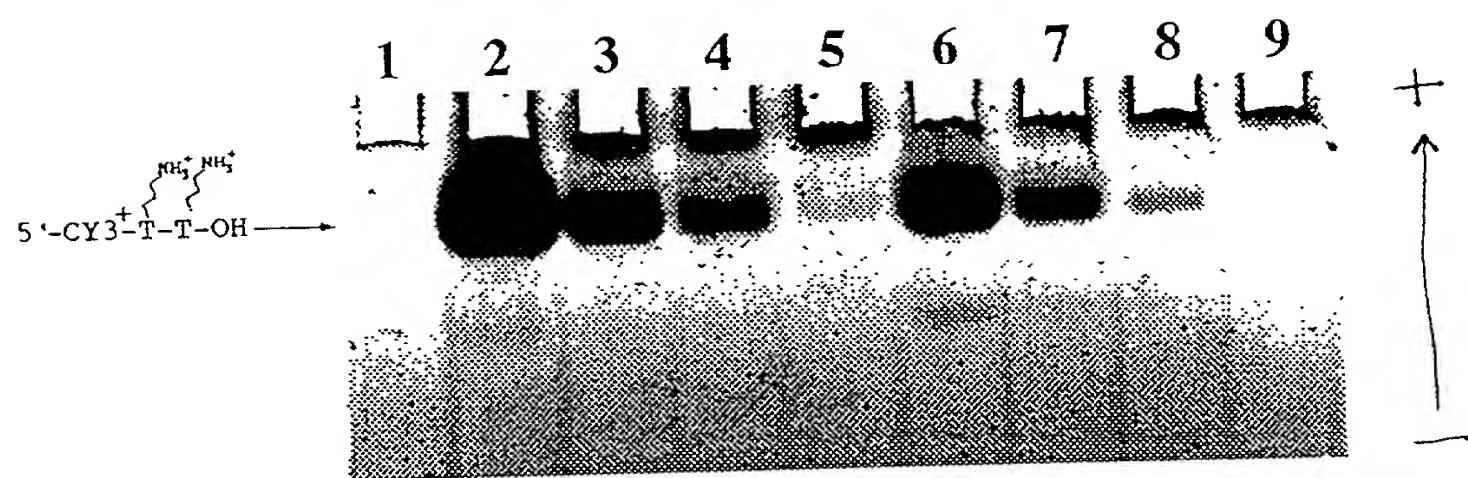


B.



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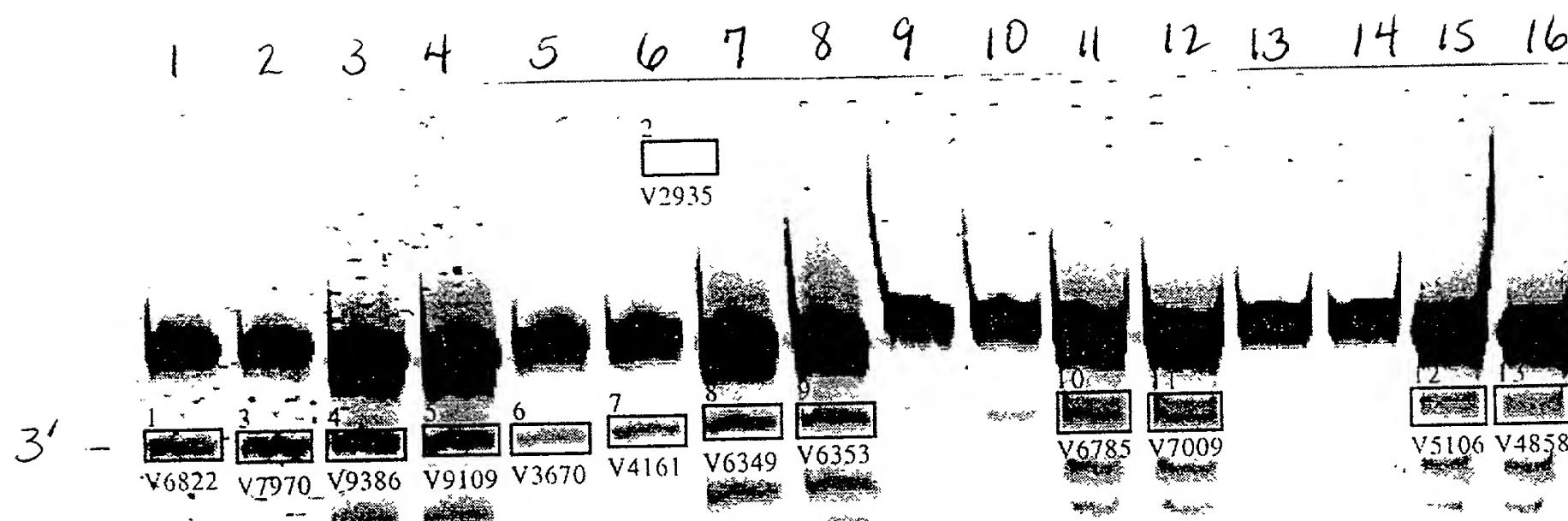
**FIGURE 20**



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**FIGURE 21**

A

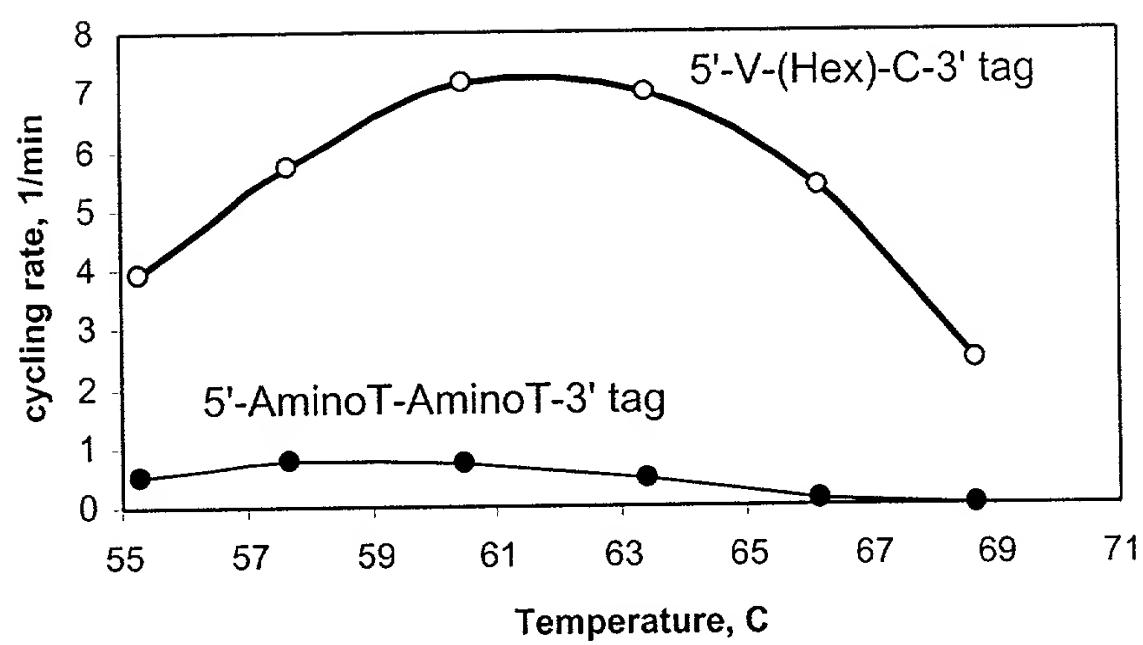


B 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16



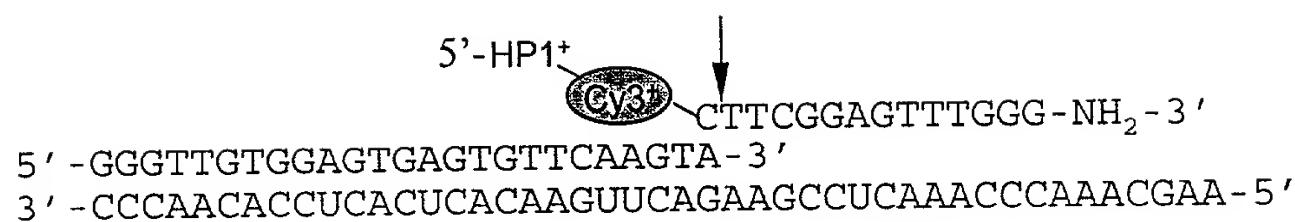
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# FIGURE 22

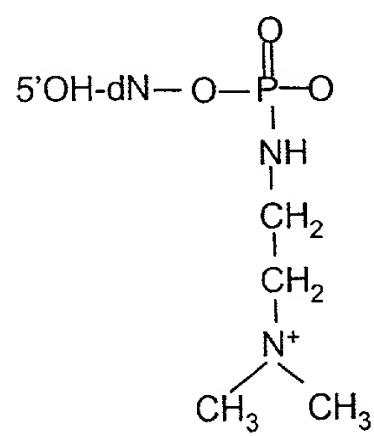


**FIGURE 23**

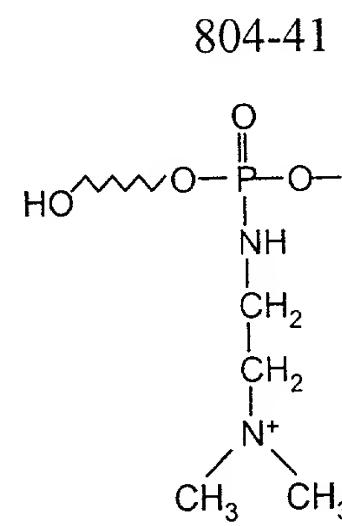
**A.**



**B.**



V(dN)



V(HEX)

804-41

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FIGURE 24A

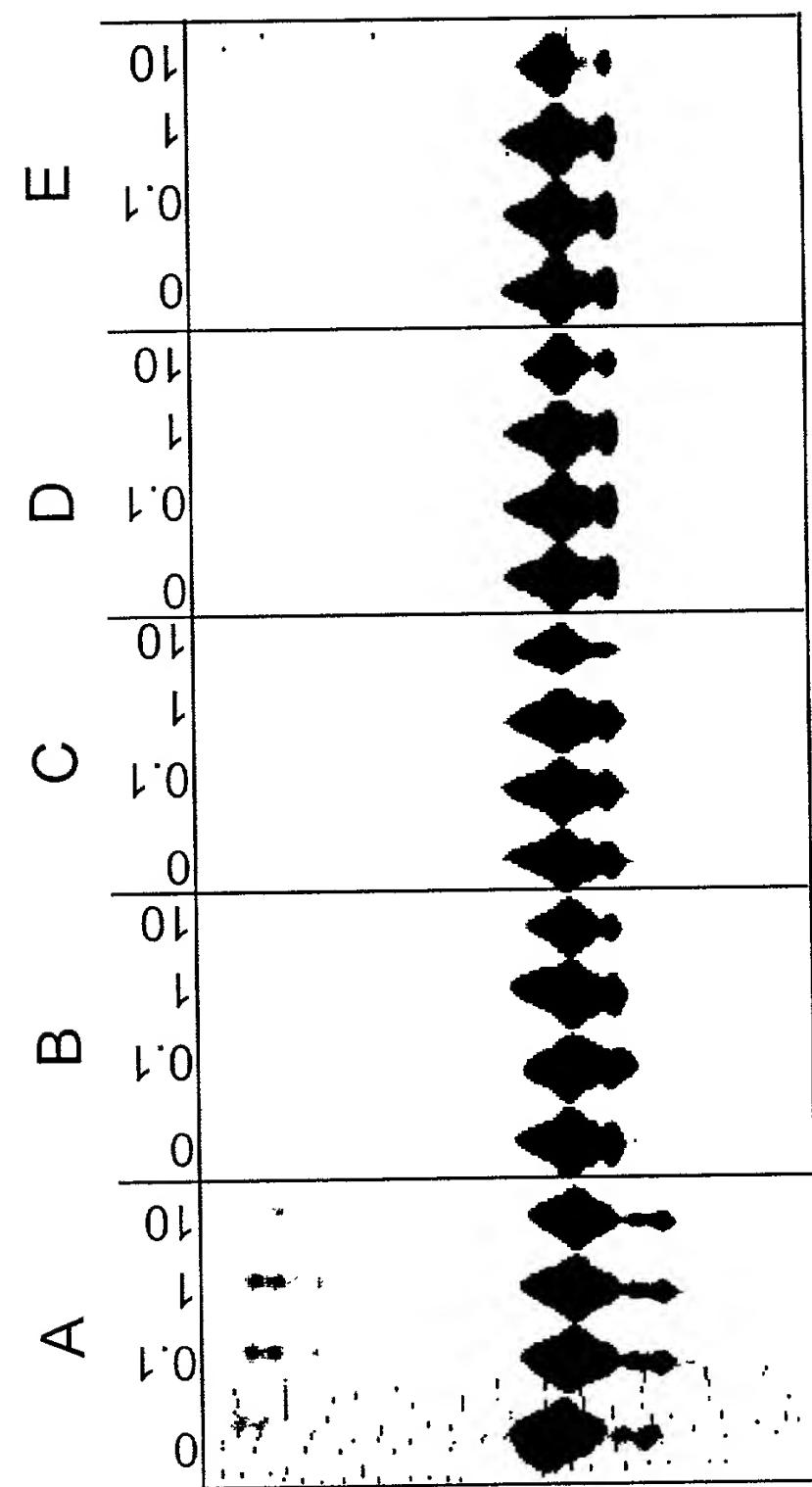
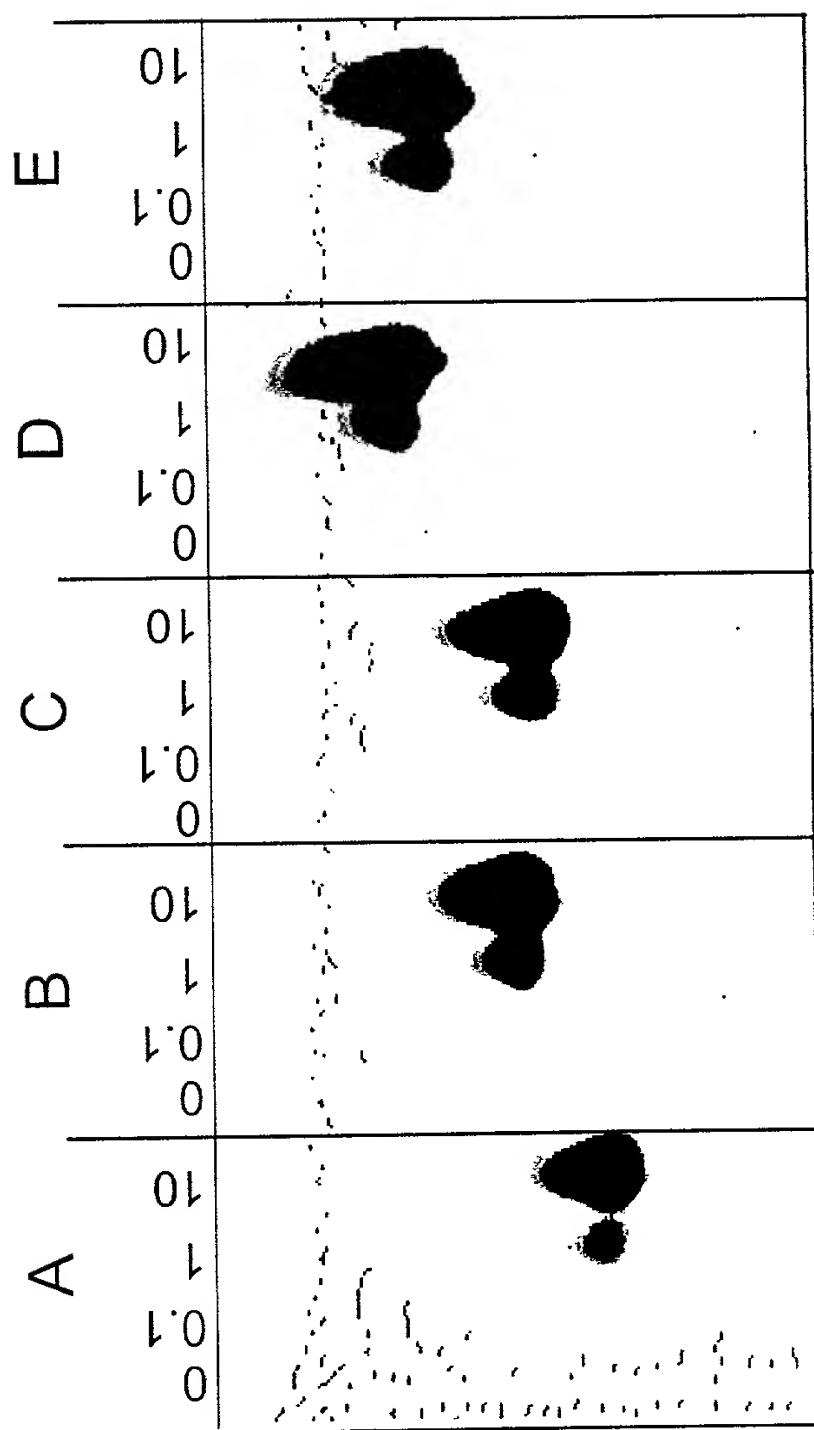
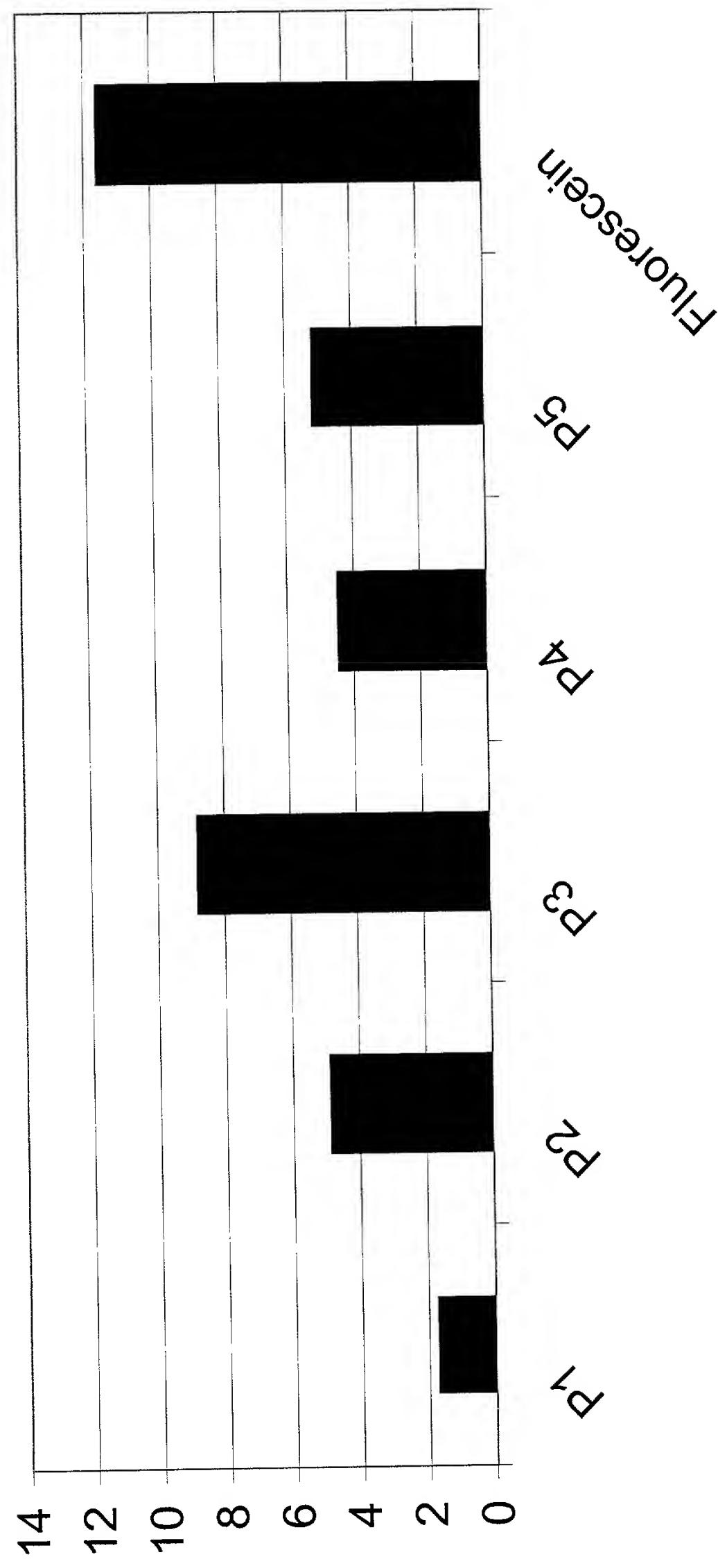


FIGURE 24B



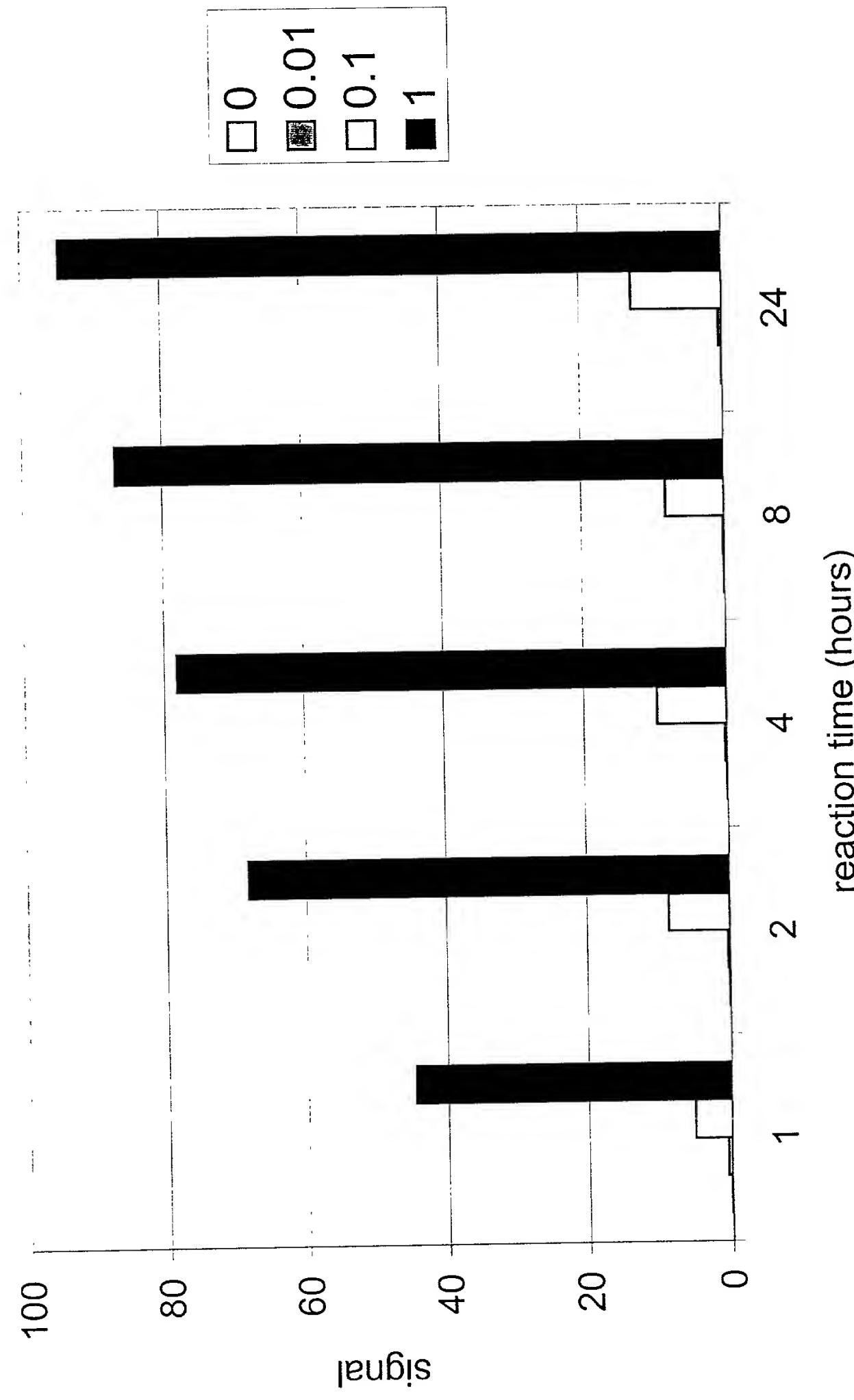
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**FIGURE 25**



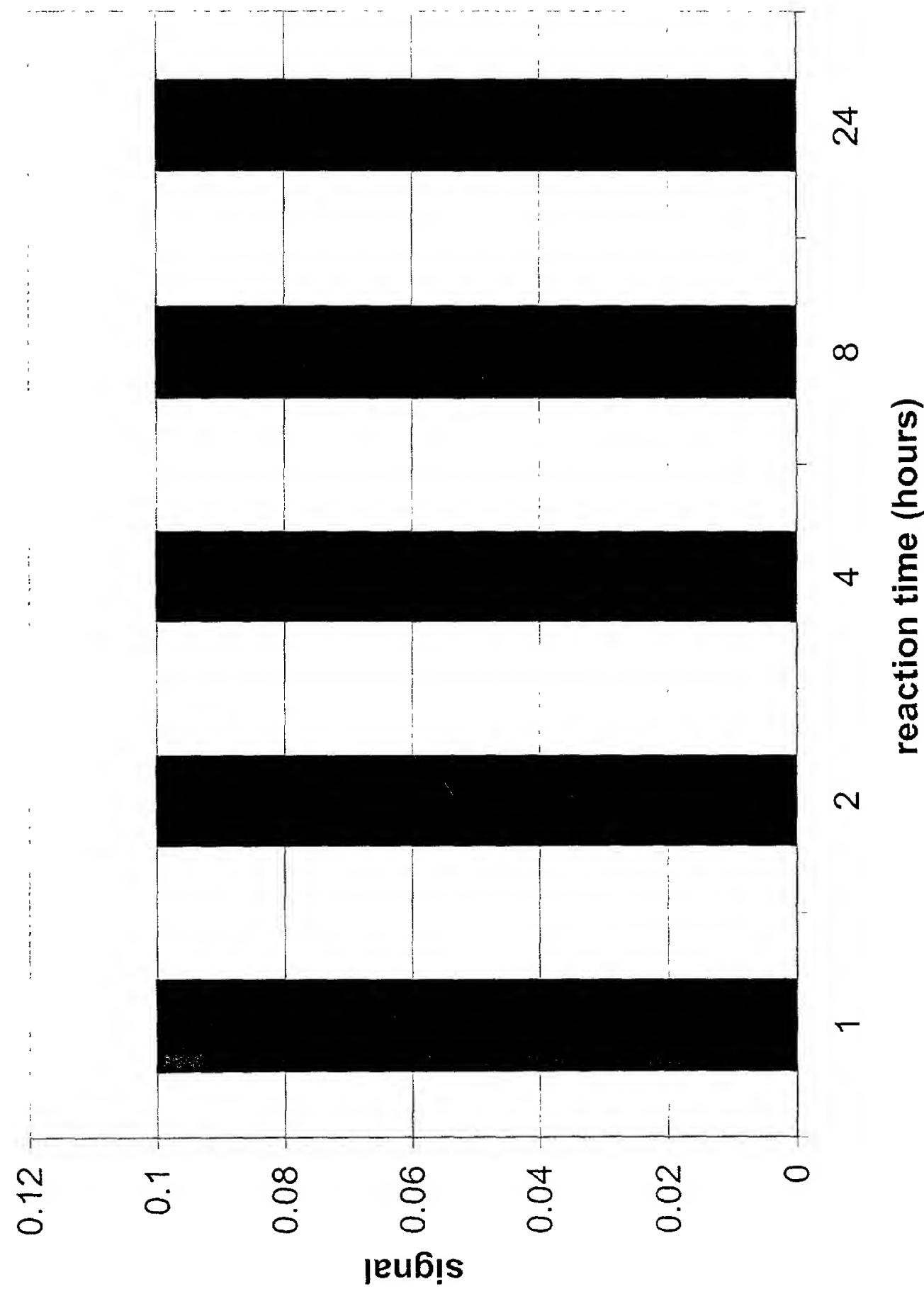
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**FIGURE 26A**



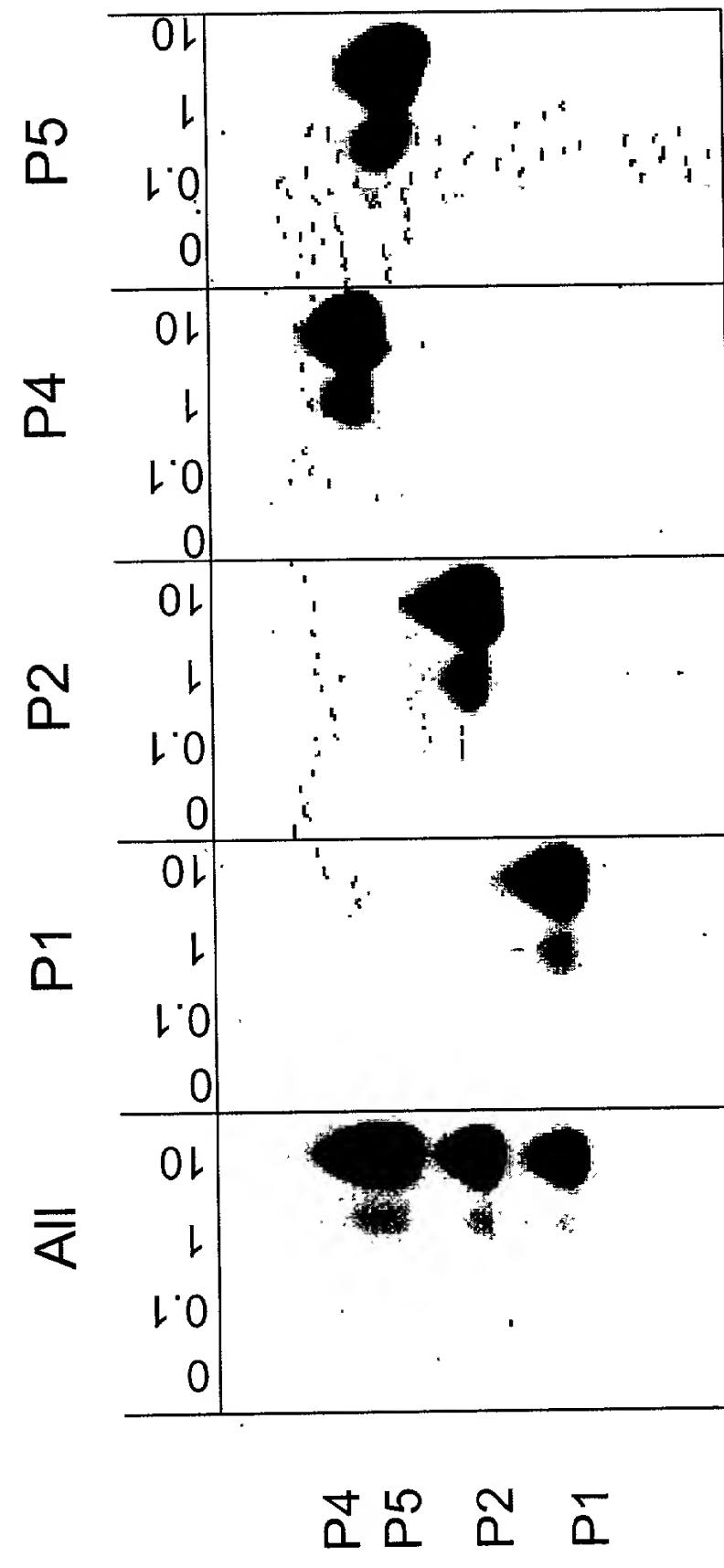
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FIGURE 26B



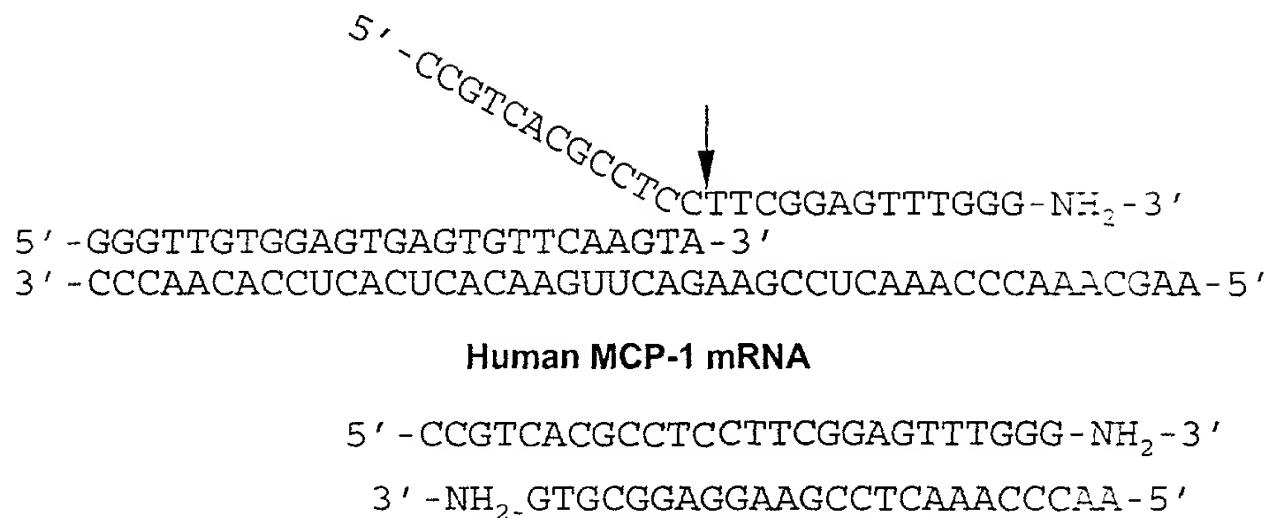
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FIGURE 27

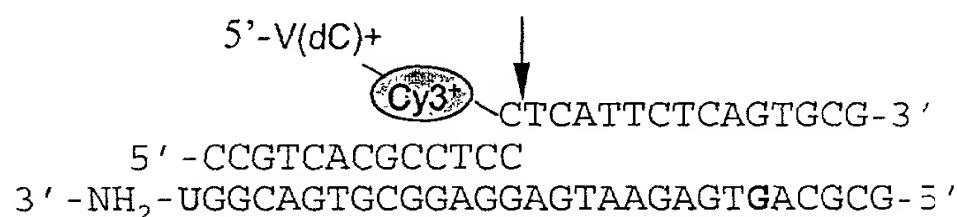


# FIGURE 28A

Primary reaction

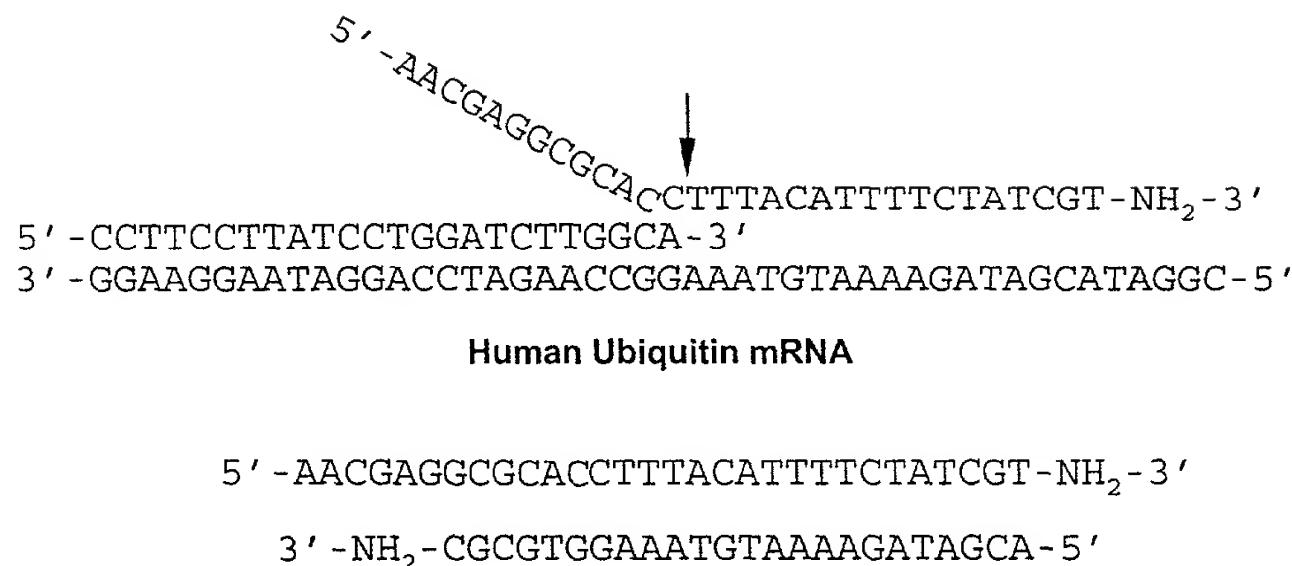


Secondary reaction



## FIGURE 28B

Primary reaction



Secondary reaction

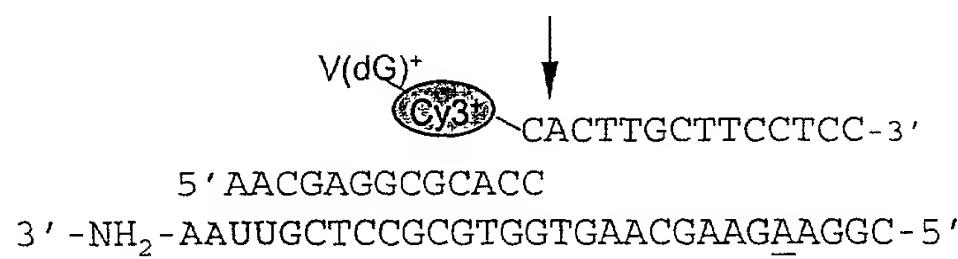


FIGURE 29

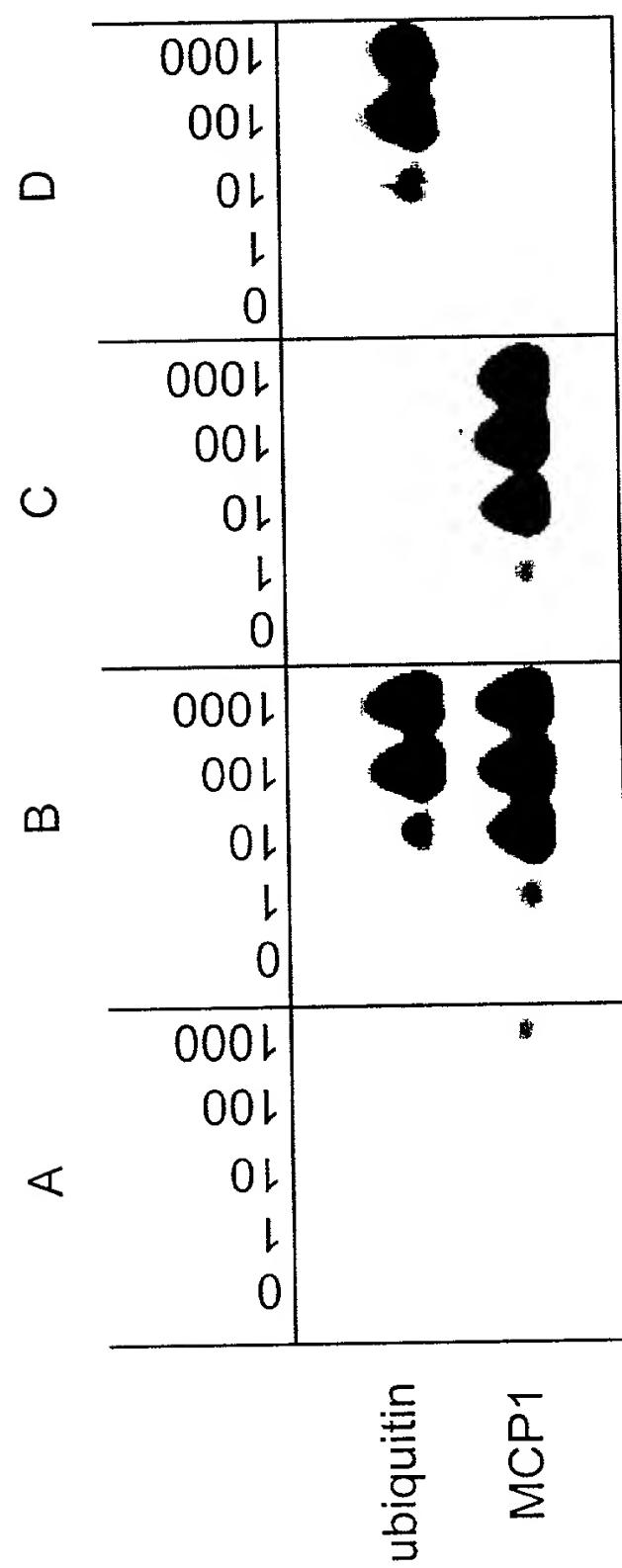
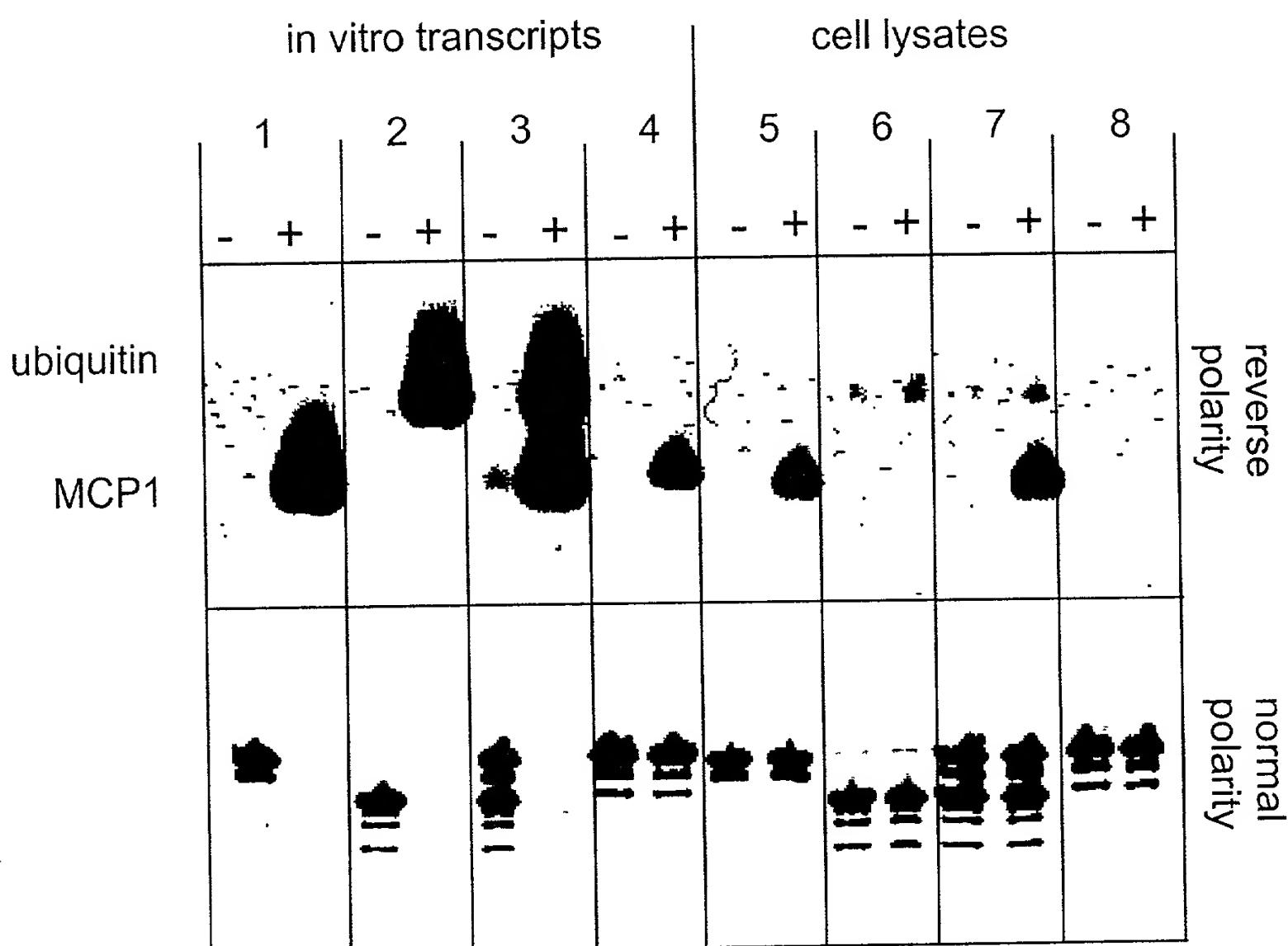
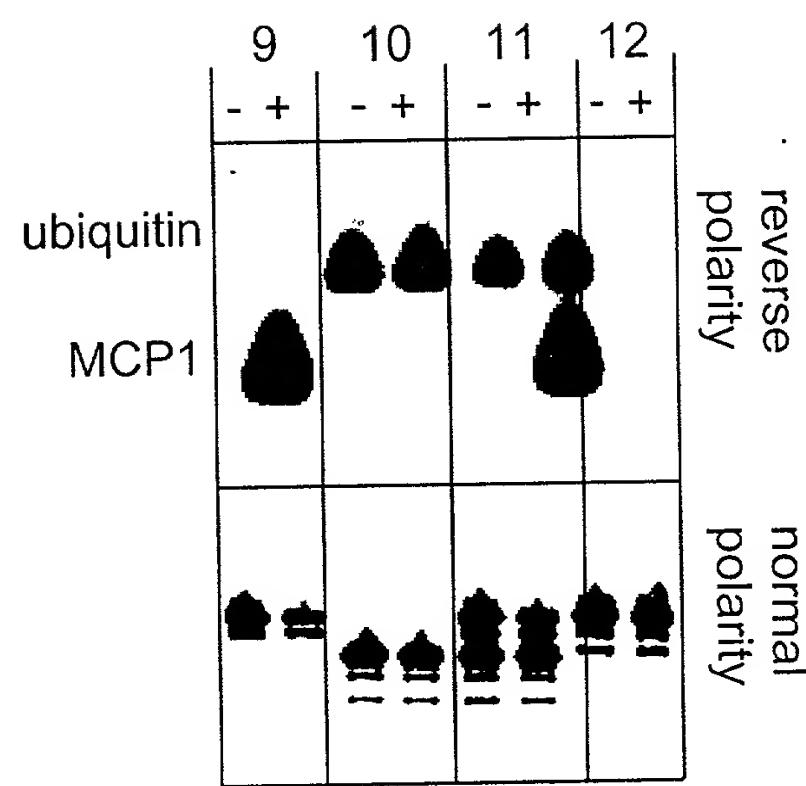


FIGURE 30A

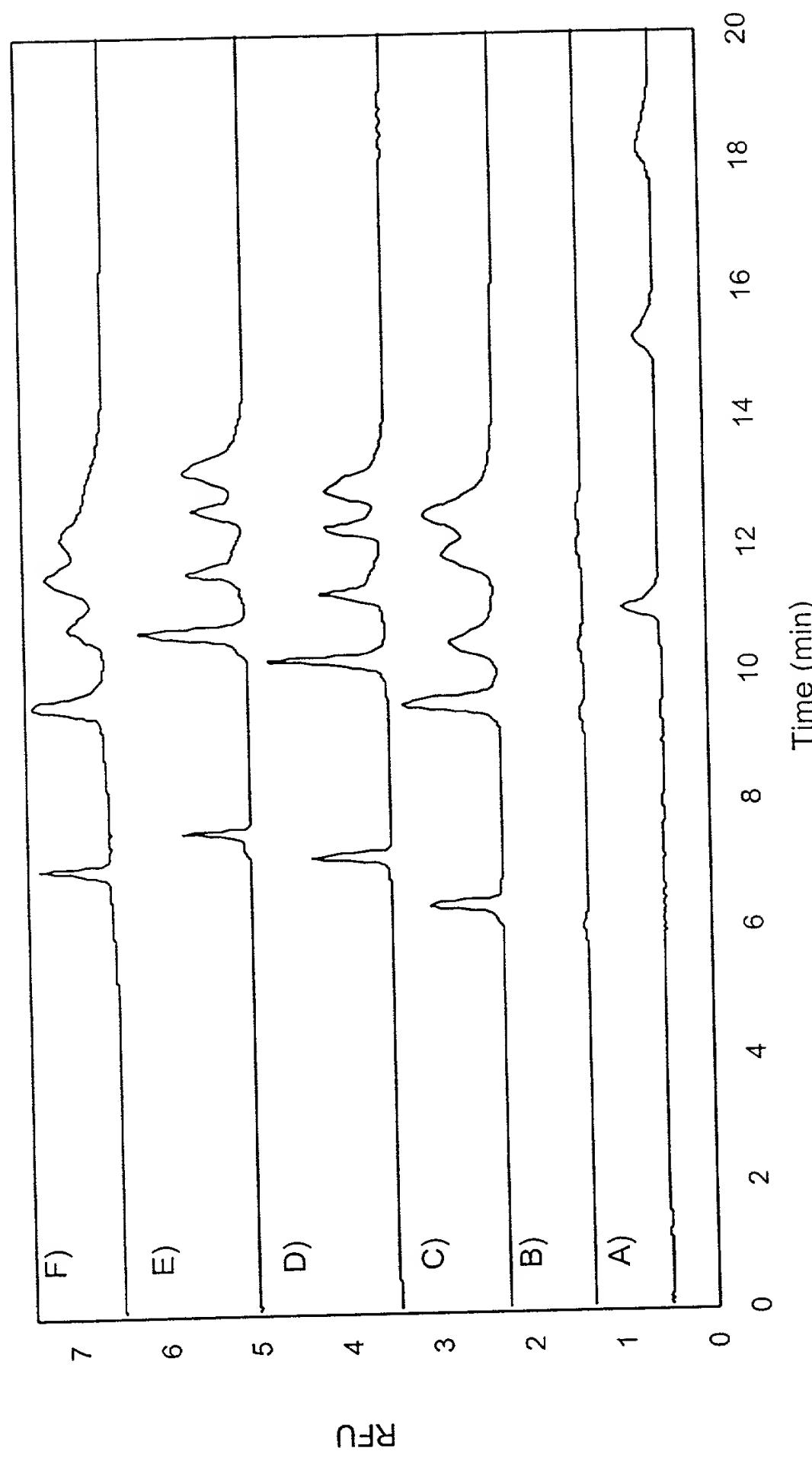


# FIGURE 30B



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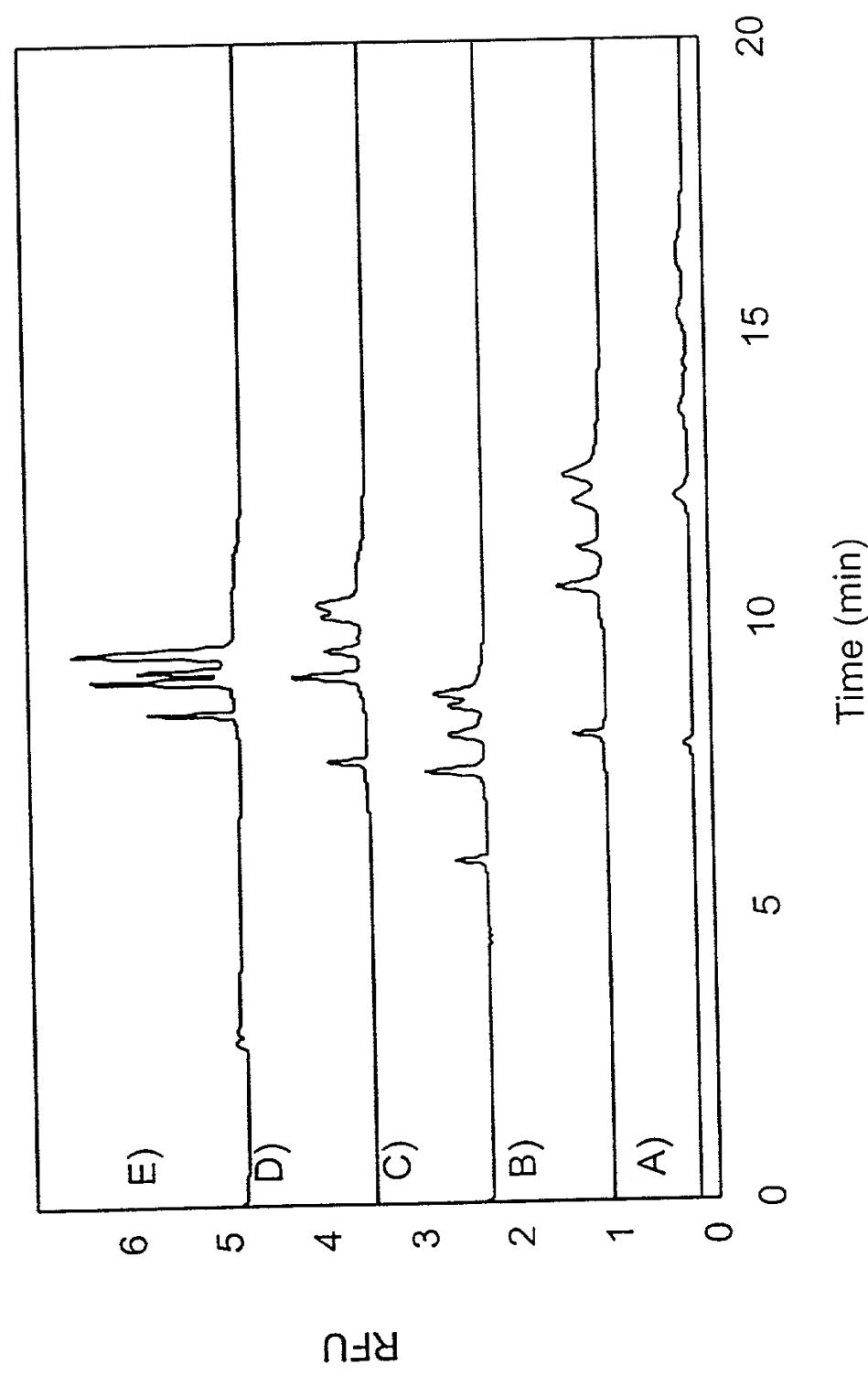
FIGURE 31



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$\eta h/\epsilon \zeta$

FIGURE 32



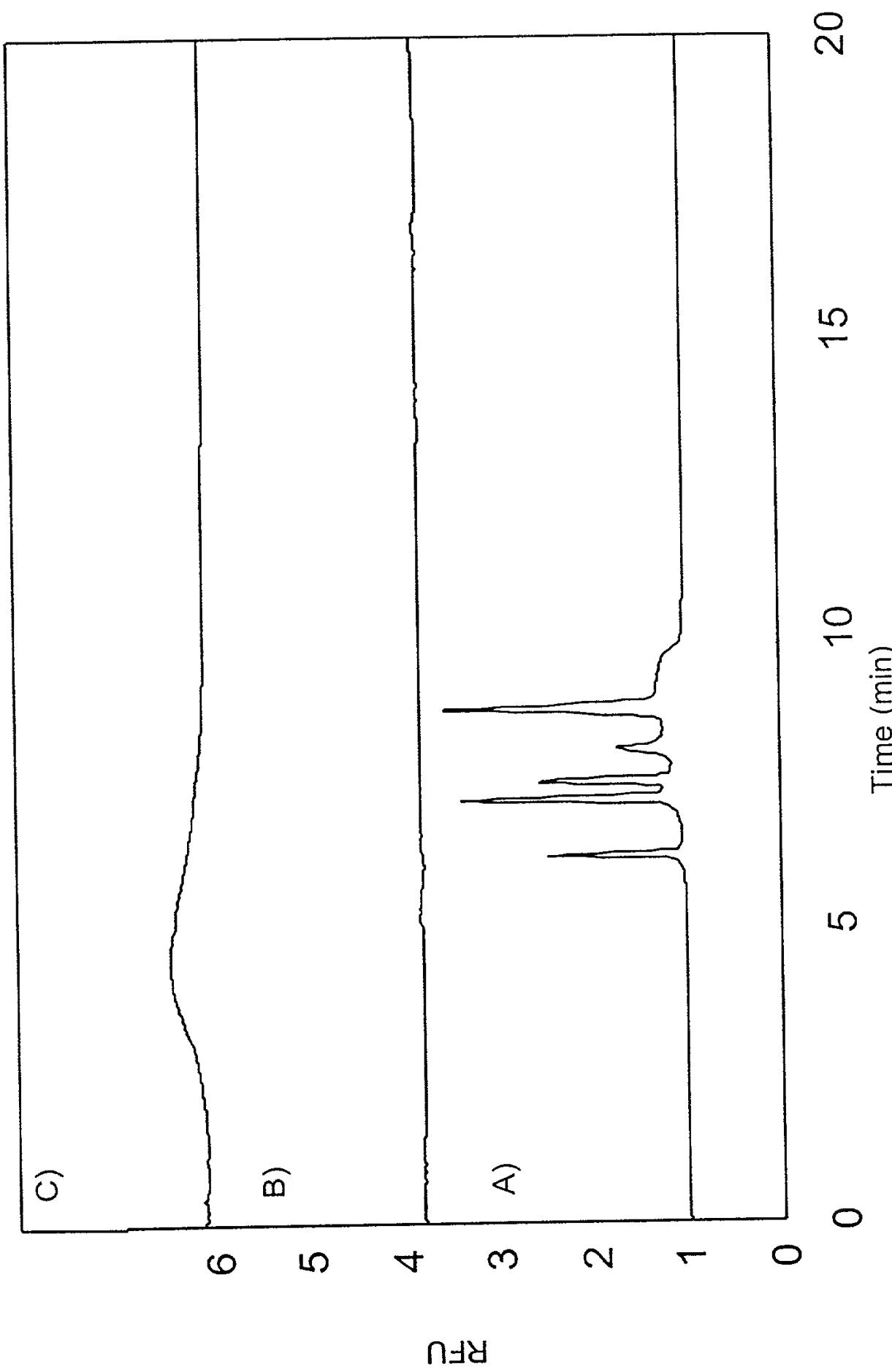
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FIGURE 33



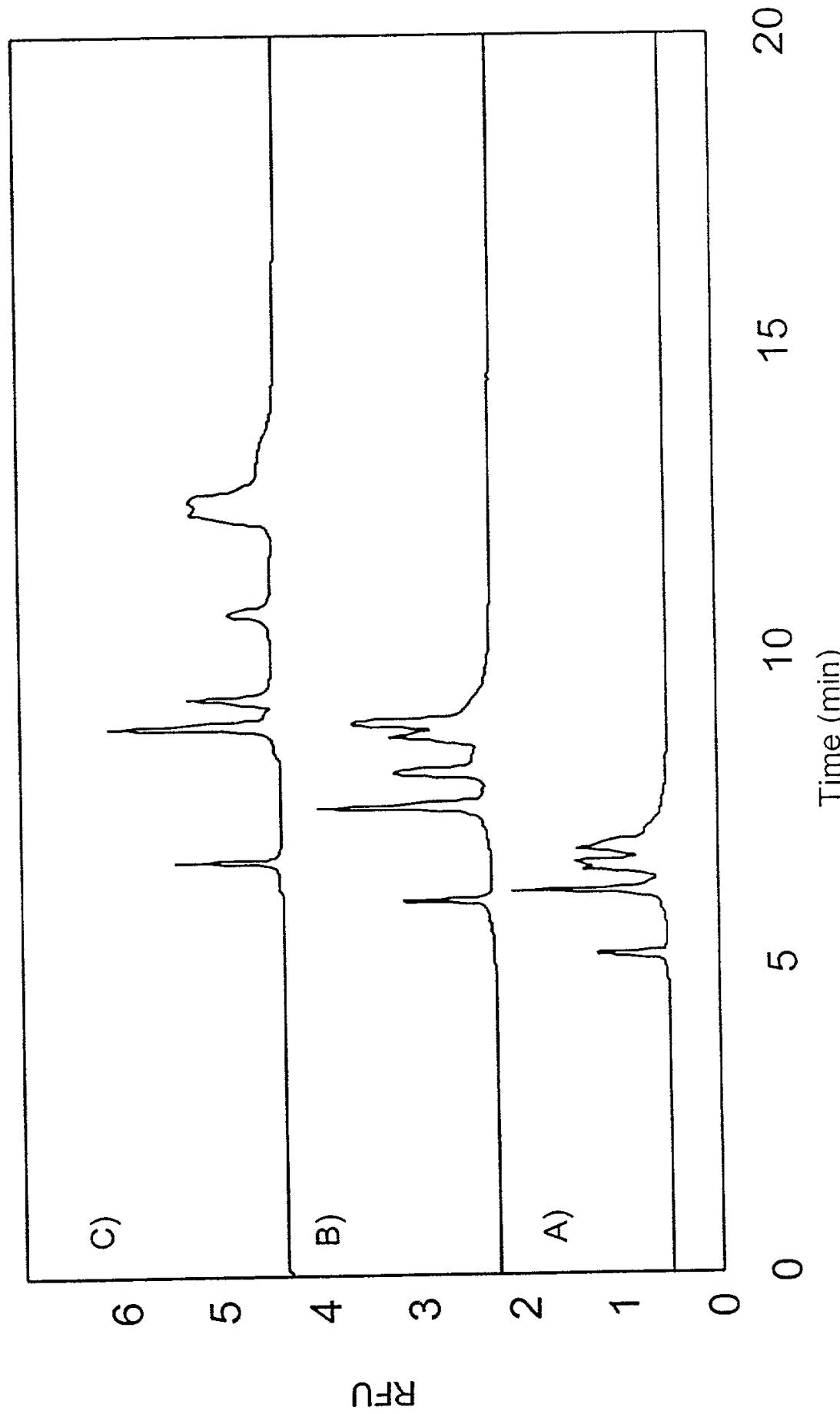
9h/6c

FIGURE 34



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FIGURE 35



9h/1h

FIGURE 36

